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CoEVOLUTION Quarterly

VERNACULAR GENDER by Ivan Illich Page 4

The Defenestration of Frague

THE DEFENESTRATION OF PRAGUE was an incident that lit the match to the Thirty Years' War (1618-1648). The Hapsburg emperor and king of Bohemia, Rudolph II, had a terrible time with the Turks, and the Bohemian Protestants took advantage of his distraction to institute assorted reforms and assume privileges previously denied them. Rudolph ratified some of the new policies in 1609, particularly freedom of religion, so that he could contend with his Turks.

When the next emperor, Matthias, came up to bat, the Turks were less of a problem and the Counter-Reformation was in full swing. Matthias repeatedly fudged on the guarantee, provoking a Bohemian revolt. He sent two royal councillors, Martinic and Slavata, with their secretary, Fabricius, to Prague to tell the Protestants to shape up. On May 23, 1618, a group of Protestant noblemen threw the trio out of the window of a castle. (Some sources say there was a pile of manure under the window – no one was seriously hurt.) The Bohemian revolt was smashed by 1620, but the war kept going.

I wish defenestration could enjoy a new popularity. I think it would be good for the souls of ambassadors and leaders to experience personal trepidation as a result of state policies. Maybe then we could hope for more humane and realistic statesmanship. And Reagan is so athletic anyway.

To commemorate one of my favorite historical events, I drew The Defenestration of Frague.

–B.S. Beaver

No. 33 Spring 1982

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COVERS

"The men are harvesting and the women are just cleaning up after them," said CQ *staffer Don Ryan. "No, the women are cleaning up and the men are just harvesting," said designer Kathleen O'Neill.*

Viewed from either side of the gender divide, the painting on the front cover shows men and women in medieval Europe, working together with different tools and tasks to get the same necessary job done — in this case, haymaking. (Actually, the men are scything hay and the women are turning it with forks.) We chose the painting to illustrate "Vernacular Gender," a major new essay by Ivan Illich about the gender-defined working relationship between men and women, complementary throughout history until the industrial revolution replaced gender with sexism. The article starts on page 4, and is followed by other articles on the nature of gender in our time.

The cover painting, found by Margaret MacLean at the University of California Berkeley's slide library, is from a 15th century illuminated Flemish calendar, where it illustrated May-June. That's all we know about it except that the original is kept at the Biblioteca Marciana, a private library in Venice, Italy. The back cover also has a European flavor; it shows our new CQ *product, a color version of the Devolving Europe map from last issue's bioregions section. —Art Kleiner*

EEK!
CRASH!
STOMP
JIM GREEN

JANE IN THE BIG CITY

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Vernacular Gender

by Ivan Illich

"What I am finding in my attempt to write a history of gender and the economics of scarcity is that this approach serves me as a better heuristic – investigating tool – than anything I have had in hand so far."

*So Ivan Illich remarked while giving us permission to print this working draft of a major portion of his next book (to be called **Vernacular Gender**, available from Pantheon Books, 400 Hahn Road, Westminster, MD 21157, later in 1982). Illich is the radical scholar who has previously revolutionized the perception of education (**Deschooling Society**, 1972), medicine (**Medical Nemesis**, 1977), energy (**Energy and Equity**, 1974), and economics (**Toward a History of Needs**, 1980; **Shadow Work**, 1981).*

As with his previous pre-book publishing, he welcomes noncommercial xerox copying of his material and encourages critique of the work in progress. This you can do by writing him (we're glad to forward mail to Berlin) or you could attend the four-month, twelve-session course "Toward a History of Gender" which he is giving this fall (1982) at the University of California, Berkeley. While there he hopes to set up an ad hoc research project on the subject. "In the next five years I expect to put out a series of monographs on gender and scarcity."

This early draft lacks the comprehensive footnotes and references the book will have. Places where Illich's text has been edited are indicated by ellipses (. . .). With his New Hampshire assistant, Susan Hunt-Herbeny, we have assembled a partial set of references. As usual, Illich's choice of data, interpretations, and conclusions are splendidly controversial. On reading "Vernacular Gender" I am torn between impulses to hug that tree and to kiss it goodbye. I also realize that even as an old native-watcher, when I recently visited a native-versus-tourist culture in the South Pacific, I saw it with Illich-new eyes. –Stewart Brand

I. SEXISM AND ECONOMIC GROWTH

I KNOW OF NO INDUSTRIAL SOCIETY where women are the economic equals of men. Of everything that economics measures, women get less. The literature dealing with this economic sexism has recently turned into a flood. It documents sexist exploitation, denounces it as an injustice, usually describes it as a new version of an age-old evil, and proposes explanatory theories with remedial strategies built in. . . . You can no longer mention sex discrimination without creating the impression that you want to contribute to the political economy of sex: either you want to promote a "nonsexist economy," or you are engaged in whitewashing the sexist economy which we have. Although I shall build my argument on the evidence of discrimination, I do not want to do either. To me, the pursuit of a nonsexist "economy" is as absurd as a sexist one is abhorrent. Here I shall expose the intrinsically sexist nature of economics as such, and clarify the sexist nature of the most basic postulate on which economics, "the science of values under the assumption of scarcity," is built. I shall explain how all economics entails the destruction of *vernacular gender*, and thrives on the exploitation of *economic sex*. . . .

◀

Harvest time: male peasants wearing hats mow the wide meadow in unison, while two women in the foreground rake and stack the hay. Illuminated between 1413 and 1416, this is the illustration for June in The Très Riches Heures of Jean, Duke of Berry (George Braziller, Inc., New York). The picture and caption research for this article was done by Berkeley anthropologist Margaret MacLean, with help from Art Kleiner.

▶

Around 1900, almost 500 years after the Duke of Berry's calendar, this photograph of a similar division of tools by gender was taken in rural England. The two men have been scything the corn and the woman has been raking. The two scythes were probably, like most hand-tools, individually owned. From Village Life and Labor, Ralph Samuelson, Editor (Routledge and Kegan Paul, Boston).

It was not easy to spell out what I have to say. More than I realized when I began, the ordinary speech of the industrial age revealed itself as *both* genderless and sexist. Linguistically, I found myself in a double ghetto — unable to use words in the traditional resonance of gender, and unwilling to repeat them with their current sexist ring. I first noticed the difficulty when I tried to use earlier versions of this text in my lectures during 1980-81. Never before had so many colleagues and friends attempted to dissuade me from a task on which I had embarked. Most felt that I should turn my attention to something less trivial, less ambiguous or less scabrous; others insisted that in the present crisis of feminism, talk about women was not for men. Listening carefully, it seemed to me that most of my interlocutors felt vexed because my reasoning interfered with their dreams: with the feminist dream of a genderless economy without compulsory sex roles, with the leftist dream of a political economy whose subjects would be equally humans, with the futurist dream of a modern society where people are plastic, their choice of being a dentist, Protestant, male, or gene-manipulator deserving the same respect. The conclusion about economics *tout-court*, which my perspective on women's discrimination revealed, upset each dream with equal force, since the desires which these dreams express are all made of the same stuff — unisex economics.

An industrial society cannot exist unless it imposes certain unisex assumptions: the assumptions that both sexes are made for the same work, perceive the same reality, and have, with some minor cosmetic variations, the same needs. And the assumption of scarcity, which is fundamental to economics, is itself logically based on this unisex postulate. Then, with scarcity accepted, the unisex postulate spreads. Every modern institution, from school to family and from union to courtroom, incorporates this assumption of scarcity, thereby dispersing its constitutive unisex postulate throughout the society. For example, men and women have always grown up; now they need "education" to do so. In traditional societies, they matured without the conditions for growth being perceived as scarce. Now, educational institutions teach them that desirable learning and competence are scarce goods. Thus education turns into the name for learning to live under an assumption of scarcity. . . .

Relentlessly, economic institutions transform the two genders into something new, into economic neuters distinguished by nothing more than their disembedded sex. A characteristic, but quite secondary, bulge in the blue jeans is now all that differentiates and privileges one kind of worker over the other. Women's economic discrimination cannot exist without this abolition of gender and disembedding of sex. This I shall attempt to establish with my argument. And if this is true, namely, that economic growth is intrinsically and irremediably gender-destructive and sexist, then sexism can be reduced only at the "cost" of economic shrinkage. . . .

The ideal of unisex economic equality is now dying, just as is the ideal of growth leading to a convergence of gross national product (GNP) north and south of the equator. But it is now possible to invert the issue. Instead of clinging to the dream of nonsexist growth, it now appears more sensible to pursue economic shrinkage as the policy along which a nonsexist or, at least, a less sexist society can come into being. Upon reflection, I now see that an industrial economy without a sexist hierarchy is as farfetched as a tribal society without the exchange of women by their male kin. Both visions are pipe dreams, regardless of the sex of the dreamer. But the reduction of the cash nexus of both commodity production *and* dependence is *not* in the realm of fantasy. Such a cutback, however, means the repudiation of everyday expectations and habits now thought "natural to man." Many, then, even including some who know that rollback is the necessary alternative to horror, view the choice as impossible. But a rapidly growing number of experienced people, together with an increasing number of both convinced and opportunistic experts, agree that cutting down is the wise choice. Subsistence that is based on a progressive unplugging from the cash nexus now appears as a condition for survival. Without negative growth, we cannot maintain an ecological balance, achieve justice between regions, or foster comeliness among the population. And the policy must be implemented in rich countries at a much higher rate than in poor ones. Perhaps the best measure of the maximum anyone can reasonably hope for is equal access to the world's scarce resources at the level currently typical for the poorest nations. The translation of such a proposition into specific action would require a multifaceted alliance of many diverse groups and interests. Because of this need, I shall here establish the linkage between negative growth and the reduction of sexism. . . .

The theoretical structure of this paper allows me to oppose two modes of existence which I call *vernacular gender* and *economic sex.* The terms themselves indicate that both forms of being are dual *and* that the two dualities are *very* different in kind. By gender I mean the duality which sets off men and women under circumstances and conditions which prevent them from saying, doing, desiring, or perceiving "the same thing." By economic sex I mean the duality which stretches toward the illusory goal of equality between men and women. Under this construction of reality, as I shall show, the duality itself is mostly fanciful. The essay, then, is cast in the form of an epilogue on the industrial age and its chimeras. Through writing it, I came to understand in a new way — beyond what I saw in **Tools for Conviviality (NWEC** p. 40) — what this age has irremediably destroyed. Therefore, I know and say nothing about the future. . . .

"Sunday afternoon we get it together. I cook the steaks and my wife makes the salad." From Suburbia, by Bill Owens (1973; $10 postpaid from Working Press, P.O. Box 687, Livermore, CA 94550).

II. ECONOMIC SEX

OVER THE YEARS, the discrimination against women in paid, taxed, and officially reported jobs has not changed in severity but has grown in volume. Presently, 51 percent of U.S. women are in the labor force; in 1880, only 5 percent were employed outside the home. Today, women comprise 42 percent of the U.S. labor force, and in 1880 only 15 percent. Today, 50 percent of all married women have their own income from a job, while only 5 percent had outside, paying jobs then. Today, the law keeps all curricula and careers open for women, but in 1880 many of both were closed. Today, women spend 28 years in employment; then, the average was 5. These all seem like significant steps toward economic equality, until you apply the one measuring stick which counts. The median yearly earnings of the average full-time employed woman still hover around a magical proportion of man's average earnings: 59 percent, take or add 2 percent — the same percentage as one hundred years ago.[1] Neither educational opportunities nor legislative provisions nor revolutionary rhetoric — political, technological, or sexual — have changed the order of magnitude by which women, in their earnings, stand below men. What at first sight looks like so many steps of progress toward equity is, in the perspective of the average woman, only a series of events by which more women have been quietly incorporated into the population which is on the job economically discriminated against by sex. The current median lifetime income of a female college graduate, even if she has an advanced degree, is still comparable to that of a male high school dropout. . . .

During the sixties, women's research dealt mostly with two themes: physical violence against women by rapists, husbands, and physicians, and working conditions at wage labor. The patterns discovered by both kinds of research are extremely uniform, and depressing. In every country, discrimination and violence spread at the rate of economic development: the more money earned, the more that women earn less — and are raped. Seldom has such a social configuration been denied for so long and then, within ten years, so smugly accepted. Research on work during this first wave of women's studies at U.S. universities dealt primarily with wage labor: low pay, limited opportunities, degrading roles, misrepresentation on union boards and precarious job security. And in 1981, the International Labor Organization reported that worldwide most women work in non-unionized urban jobs, and in only a few categories; when they do belong to a union, they are seldom taken into account in contracts, and even when the union is made up primarily of women, men are the key representatives for it at negotiations. . . .

Most of the early postwar feminist research was movement-borne and action-oriented. Some of its proponents followed liberal rhetoric calling for equal opportunities-cum-affirmative actions; others busied themselves with holy writ, chewing on Marx, Freud, and Reich to get another establishment's approval. Women's rights and worker's rights then seemed compatible with industrial development and progress. In spite of its weaknesses and dullness, this research remains fundamental for our understanding of how industrial society works. It manifested a surprising homogeneity of discrimination against women at work in socialist and capitalist, rich and poor, Latin and Anglo, Catholic, Protestant, and Shinto societies: at equal levels of income, women in such different places as France and Japan got the same kind of bad deal. The pattern of women's exclusion from privilege is more uniform than that practiced against Blacks or Jews. In addition, nowhere can women establish a female regime; there is a Tanzania for Nyerere, and an Israel for Begin, but no Amazonia in sight. . . .

The Nether Economy

By the mid-seventies, the orientation of women's research relevant for economic analysis had changed. Some studies began to struggle with insights which could not be properly expressed in the categories to which we have gotten accustomed in history, economics, ethnology, or anthropology.[2] For this kind of research, the smaller bite into the salary cake is of secondary importance. Something quite other is of greater significance: how to explain that in every industrial society women are discriminated against in employment only to be forced, when off the job, to do a new kind of *economically* necessary work without any pay. It was obvious to all that women lose out when they apply for a job, when they seek advancement, when they try to hold on to a paying position. But outside of and along with wage labor, which had become general during the nineteenth century, a new kind of economic activity had come into being. Here, to a much greater extent, and in a different manner from men, women were put to work. They were — and are — deprived of equal benefits from wage labor only to be bound with even greater inequality to work which did not exist before wage labor came into being.

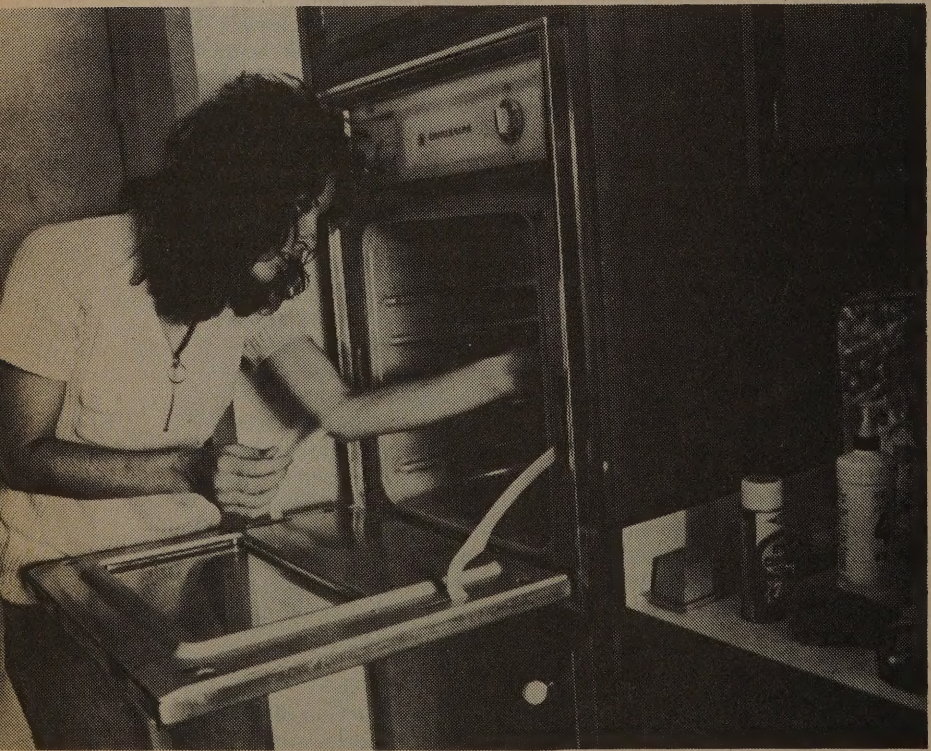
In every country, discrimination and violence spread at the rate of economic development: the more money earned, the more that women earn less — and are raped.

The best evidence for the new nether economy comes from historians of housework.[3] Their writings made me understand that the difference between housework formerly and today cannot adequately be put into traditional language or satisfactorily expressed in the categories of social science jargon. What housework is now cannot be predicated about women of old. And the modern woman finds it hard to believe that her ancestor did not have to work in a nether economy. The new historians of housework describe the typical activity of the housewife in a modern apartment as something unlike anything women have done outside industrial society, as something which cannot be suitably accounted for as just one more activity of the unreported economy, and as something which the dogmatic categories of "social reproduction" simply cannot meaningfully signify.

Looking closer at the phenomena which anthropologists and historians of housework review, I began to see that the contemporary labor market, both reported and unreported, constitutes only the tip of an iceberg. Most of the toil to support the visible tip is below the waterline, work done in the nether economy. Employment in the various kinds of wage labor can only increase as the submerged drudgery also expands. And modern housework is a typical, but not exclusive, part of that netherworld's reality — not only unreported, but impenetrable for the economic searchlight. And since no common nomenclature has yet been used to make this distinction explicit, I shall oppose to the work done in the reported and unreported economy a nether economy of shadow work which forms its complement.

Unlike the production of goods and services, shadow work is performed by the consumer of commodities, specifically, the consuming household. I call shadow work that activity by which the consumer transforms the purchased commodity into a usable good. I designate the time, toil, and effort which must be expended to add to the purchased commodity that additional value without which it is unfit for use. Therefore, it names an activity; people must engage themselves in shadow work to the degree to which they attempt to satisfy their needs by means of commodities. By introducing the term *shadow work* I distinguish the cooking of eggs today and in the past. When a modern housewife goes to the market, picks up the eggs, drives them home in her car, takes the elevator to the seventh floor, turns on the stove, takes butter from the refrigerator and fries the eggs, she adds value to the commodity with all these steps. This is not what her grandmother did. The latter looked for eggs in the chicken coop, cut a piece from the lard she had rendered, lit some wood her kids had gathered on the commons, and added salt which she had bought. Although the example might sound romantic, it should make the difference clear. Both women prepare scrambled eggs, but only one uses a marketed commodity and highly capitalized production goods: car, elevator, electric kitchen with its appliances. One carries out woman's work in creating subsistence; the other must put up with the household burden of shadow work.

Changes in housework reach far below the surface. Rising standards of living have made it more capital intensive by providing numerous machines and gadgets. The investment in the household equipment of a median Canadian family — and the same would be true in every other modern home — is now higher than the median plant investment per factory job in two-thirds of all nations. As a result, housework has become more sedentary, and varicose veins have decreased. For a minority, this has meant an interesting, well-paid job, free time "to write their books or go fishing." But the new kind of housework has also become more lonely, more dull, more impersonal, more time polluting. Valium consumption and addiction to TV soap operas have often been suggested as measures of this new muffled stress. But



Housework in two centuries. Above, the labor intensive 19th century. A Crow Indian woman cleaning entrails and a North Carolina woman churning. Both pictures are from To Be a Woman in America 1850-1930 by Annette K. Baxter (Times Books, New York). At left, the capital intensive household of the 20th century. The labor needed to maintain that consumer household should be considered shadow work. Photograph from Suburbia by Bill Owens.

much more fundamentally, housework has become the paradigm for the new unpaid *economic* activity which in a computer-and-microprocessor-equipped society is economically more fundamental than productive labor, whether this production is recorded by economists or not. . . .

Although during the nineteenth century technological change revolutionized work outside the household, it had little impact on the way housework had to be performed, except for tightening the enclosure into which each housewife was locked. Tap water relieved her from carrying the jugs and stopped her from meeting friends at the faucet. While economically women's work was something without precedent, technically it seemed to go on as always. Indoor plumbing and the new fuels, gas and electricity, which were to become nearly universal in U.S. urban areas by 1920 and in small towns by 1930, were for the great majority just technological possibilities at the turn of the century. Only as recently as the second quarter of this century did technology change the material reality of housework; simultaneously, radio and TV began to act as substitutes for community conversation. Industry now started to produce machinery for housework. As industrial work became less labor intensive, housework, without diminishing, became by several orders of magnitude more capital intensive.

Development is usually described as a process by which workplaces, meaning jobs, are created. But it can with equal right be called that process by which more goods are offered on the market, each necessary and each requiring an increasing "input" of shadow work before it can be used for the satisfaction of needs. Development conventionally means an operation by which production becomes more capital intensive. It can be equally well described as the course through which increasingly more capital intensive shadow work is made necessary for the achievement of a minimum level of well-being. This shadow side of development that makes shadow work increase while wage labor decreases leads into a new kind of sexual discrimination *in* shadow work.

Shadow work is not exclusively women's domain. It is as clearly unisex as wage labor. Unpaid effort to upgrade industrial production is done by males, too. The husband who crams for exams on a subject he hates just to get a promotion, the man who commutes every day to the office, these are involved in shadow work. True, the typical "consumer" is the household, and this is run by a woman — the expression being but a euphemism for her toil. But if women alone carried the burden of shadow work, it would be silly to say that in shadow work too, discrimination works against women. Yet this is precisely what happens. In shadow work much more intensely than in wage labor women are discriminated against. Less measurably but even more massively than in wage labor there is a sex differential in the bondage to this work. They are tied to more of it, they must spend more time on it, they have less opportunity to avoid it, its volume does not diminish when they take outside employment, and they are penalized more cruelly when they refuse to do it. What women are cheated out of in wage labor through discrimination is only a small fraction of the shadow price due them for their unpaid shadow work. . . .

> ONLY as recently as the second quarter of this century did technology change the material reality of housework. Simultaneously, radio and TV began to act as substitutes for community conversation.

Shadow work, however, cannot be measured in units of currency, although it is possible to transform some specific activity now exacted as shadow work into labor done for wages. This has been tried in the case of commuters. Some Austrian unions, following the lead of a Swedish example, obtained recognition by the employers that commuting was part of their work. Commuting, they argued, is a burdensome task imposed on each worker. It becomes necessary because factories are located not where workers have easy access to them but where property is cheap, highways numerous, and sites for executive villas close. Commuting constitutes that shadow work by which the worker picks up his own labor force each morning, puts it into a car, and then, acting as the chauffeur of the commodity which the employer has contracted to rent during the eight-hour day, drives this commodity to the workplace. In addition, this shadow work requires a high level of capital investment. A significant percentage of each workday's wages must be spent by the worker for the purchase and maintenance of the car and to pay the taxes which provide the highways on which the car runs. And commuting remains shadow work, whether the vehicle is a car, a bus, or a bicycle. Some small unions won their point. Their members then acted each morning as the chauffeurs employed by the factory to transport their own bodies to work. If, however, this kind of argument were generally accepted, and workers were paid for the now unpaid toil expended on "capitalizing themselves" for the job and then transporting themselves to and from work, the industrial system would cease to function.

As with these men, women can also assert that their shadow work ought to be transformed into paid labor. But as soon as the value of shadow work and wage labor are compared in monetary terms, the paradoxical nature of the former becomes evident. At least in the nonmilitarized sector of every modern economy, the input of shadow work is now arguably superior to the input of wage labor. For example, the sum of all the time spent producing goods and services, be they desired or resented by the client, may be less today than the time spent adding to the value deficiency of the product. With the new self-service economy, the proportion of shadow work cannot but rise dramatically. Salaries for shadow work, therefore, cannot be paid, not because it is not work, but because its value exceeds the GNP. When feminists argue that women should be paid for what it takes to ready for consumption what the family income buys, they are mistaken when they ask for a wage. The best they can hope for is not a shadow price, but a consolation prize. The gratuitous performance of shadow work is the single most fundamental condition for the family's dependence upon commodities. Even if these commodities were to be produced increasingly by robots, industrial society could not do without shadow work. It is to money what the neutron is to the electron. It is as unlike productive "employment," in which commodities for others are produced, as it is unlike homesteading and traditional household activities, which are performed neither for nor with much money. . . .

Discrimination against women in formal employment and in shadow work is worldwide, and the same is probably true, although seldom discussed, for women in the unreported or submerged market. Discrimination both on and off the job spreads with a rising GNP, as do other side effects like stress, pollution, and frustration. Neither kind of discrimination is seriously affected by cultural background, politics, climate, or religion. Reports on discrimination follow a pattern not unlike that of reports on cancer of the breast and womb: at the same per capita GNP, geography then influences the pattern in which the malady is discussed and recognized, rather than the pattern in which it occurs. Australian women keep splendid statistics and Italian women cultivate abrasive cynicism. The barriers that keep women from privileged wage labor and the traps that lock them into the kitchen are differently explained in Japan and in the U.S.S.R., but everywhere they are comparable.

Secretaries and clerical workers of an earlier era: women taking a Civil Service typing exam in Chicago in 1909. By 1890 the number of girls graduating from high school was double that of boys, making them natural candidates for the clerical occupations opening up in major cities across the country. From To Be a Woman in America 1850-1930.

Education provides a good example. Even when it is of equal length, even if the curriculum is the same, everywhere it results in less lifetime salary for women than for men. Indeed, more education locks women even tighter into their place than men; everywhere they have less of a chance for a new start on a different track. Where the battles of the seventies have opened the executive suite to women, and have weakened the traps of the kitchen, they have disproportionately benefited the "sisters" from privileged backgrounds. A few more women behind the operating table or on the faculty, an occasional husband domesticated for washing the dishes, are rare tokens that only highlight the impartial distribution of discrimination among women as a whole and, for the majority, drive home its onerous charge. Off-the-job resentment has especially sharpened its sex-related edge. . . .

Economic Sex

Economic discrimination against women appears when development sets in. It does not then go away; nothing indicates that it ever will. The struggle to create economic equality between the sexes resembles the efforts to square the circle. Eudoxus tried and he discovered irrational numbers. The incommensurability between square and circle led to the discovery of unsuspected axioms. Others attempted this after Eudoxus, and found increasingly elegant proofs that it cannot be done. The science of economics may be in a state similar to that in which Eudoxus found mathematics. Faced by the evidence of consistent failure, we might want to entertain a different possibility, namely, that the paradigm of *homo economicus* does not square with what men and women actually are. Perhaps they cannot be reduced to humans, to economic neuters of either male or female sex.

> IN the time of Louis XIV, a man without a woman to keep house could barely survive.

III. VERNACULAR GENDER

OUTSIDE INDUSTRIAL SOCIETY unisex work is the rare exception, if it exists at all. Few things can be done equally well by women or men. The latter, as a rule, just cannot do women's work. In early eighteenth century Paris, you could recognize the bachelor from afar by his stench and gloomy looks. From notaries' records, we know that solitary men left no sheets or shirts when they died. In the time of Louis XIV, a man without a woman to keep house could barely survive. Without wife, sister, mother, or daughter he had no way to make, wash, and mend his clothes; it was impossible for him to keep chickens or to milk a goat; if he was poor, he could not eat butter, milk, or eggs. He could not cook some foods even if he had the ingredients. Even today, in the rural Mexico I know so well, a woman would rather die of embarrassment than let a man cook the beans.

From afar, the native can tell whether women or men are at work, even if he cannot distinguish their figures. The time of year and day, the crop and the tools reveal to him who they are. Whether they carry a load on their head or shoulder will tell him their gender. If he notices geese loose in the harvested field, he knows a girl must be nearby. If he comes across sheep, he knows he will find a boy. If in the slightest way the fit is improper, the native observer recognizes that he deals with people from the next valley. Only real strangers, or perhaps captives, do the other gender's work. Gender is in every step, in every gesture, and not just between the legs.

Puerto Rico is only three hours from New York. Two-thirds of its people have been to the mainland. Yet even today in the interior of the island, there is no such thing as a Puerto Rican gait; women sail down the path like sloops chopping in the tradewinds and men swagger and roll to the rhythm of the machete, but both in the unmistakably *jibaro* fashion. From afar, you know that they could not be from nearby Santo Domingo, much less be gringos from the States. In many Puerto Ricans, their vernacular gender has survived for decades, not only in the Harlem barrio, but even when they have lived mixed up with hillbillies and Blacks in the South Bronx.

Obstacles to the Study of Gender

Gender is something other and much more than sex. It bespeaks a social polarity which is fundamental and in no two places and times the same. What one can or cannot do is as different from valley to valley as the way things are done and said. The terminology used by the social anthropologist has often become a unisex mask for a reality that has two sides. What Bohr and Heisenberg have done for the epistemology of physics has not yet been done for the social sciences. That light fits the paradigms of both particle and wave; that neither theory alone fits its complex reality and that no broader framework allows us to grasp it more clearly are today everyman's truths. But that a similar approach is demanded for most social science concepts is still news for many. "Culture," like "behavior," is a term that is typically applied to "the" Puerto Rican when "he" becomes an object of study. New York professionals are trained to understand the "Puerto Rican culture." The social worker makes efforts to deal with "them." The clear distinction and delicate nuances contained within each of these terms are ignored, jammed together, violating the traditions of millennia. The teacher in the New York school tries to help the Puerto Rican "child." He does not realize that childhood only came into being just as gender vanished. And the teacher seldom reflects on the fact that he is transforming gender into mere sex, if he does that much. The symbiosis of social science and modern institutions is thus an effective device for reducing gender to sex. I shall later argue that this breakdown constitutes the decisive anthropological characteristic which sets the contemporary age apart from any other. . . .

Ambiguous Complementarity

Only the outsider perceives culture. For the insider there are men and women and then a third reality: outsiders who might be foreigners, slaves, domestic animals, untouchables, and freaks. If the outsider is perceived as a sexed being, his sex or, more properly, gender, is seen in some analogy to that of "our" men and women. Kinship is possible only between what we conceive of as men and women; it only specifies the fit between genders. What we perceive as men and what we perceive as women can meet and fit not only because but in spite of the unique contrast between them. They fit like the right fits the left. The analogy between male and female and the duality of right and left is useful at this point, principally because it allows me to explore some dangers of misunderstanding. In many cultures the left hand is the weak and powerless one; it has been subject to millennia of mutilation. Right-handedness is not just accepted or submitted to; it has become the inculcated norm. The child who would use the left is reprimanded, with the hand slapped, tied behind its back, or crippled. Organic asymmetry has become the fact. Neurological preponderance that manifests itself in greater tactile sensibility, strength, or aptitude has been turned into the ideal of right dominance. The left has become adaptive to the right as its ever needed and cherished assistant. The analogy can be and is constantly used to support the idea that the "female sex is sociobiologically male adaptive."

However, this is precisely *not* the point which I want to make. The analogy means something different. Each man and woman outside of a push-button society constantly depends for survival on the interplay of two hands. In some societies, right-handedness is more pronounced than in others. In other societies, as in the Chinese, etiquette, good taste, and world view demand that the left and the right predominate alternately in a delicate, detailed orchestration. In some societies, as among the Nyoro of Africa, to be left-handed destines one to the sacred group of diviners. But regardless of the greater power, skill, or dignity attributed to one hand, more often the right than the left, the two hands are used for complementary actions and gestures.[4] Tradition rigorously instructs the left-handed shaman which hand he must use for the offering. The two hands always act together according to two programs which are never the other's mirror image. Thus, this unique kind of duality is always ambiguous. The oldest traditions place the fundamental trait of our existence into this singular kind of bifurcation. It constitutes an ambiguous complementarity, the opposite not only of the mirror image but also of the shadow. As duality, it is distinct from the positive copy of a negative and from the deterministic match of the DNA's double helix. I assume it to be the foundation of metaphor and poetic speech — the only mode fitting to express it. Twins, the navel/umbilical cord, the yin/yang are among the mythological representations in which this duality searches for expression. One of the difficulties in the opposition between gender and sex should now be less obscure. It may be appropriate to consider vernacular gender as the foundation of ambiguous complementarity, and sex of economic neuters as the modern experiment to deny or transcend this foundation. It is now clear that two distinct types of language are required for speaking about what once existed and what now obtains. . . .

GENDER is in every step, in every gesture, and not just between the legs.

Gender and Tools

Tools are intrinsic to social relationships. Acting, each person relates himself to his society through the tools he masters. To the degree that one actively masters one's tools, the shape of the tools determines his/her self-image. In all preindustrial societies, a set of gender-specific tasks is reflected in a set of gender-specific tools. By grasping and using a tool, one primarily relates to the appropriate gender. As a result, intercourse between genders is primarily social. Separate tool kits determine the material complementarity of life.

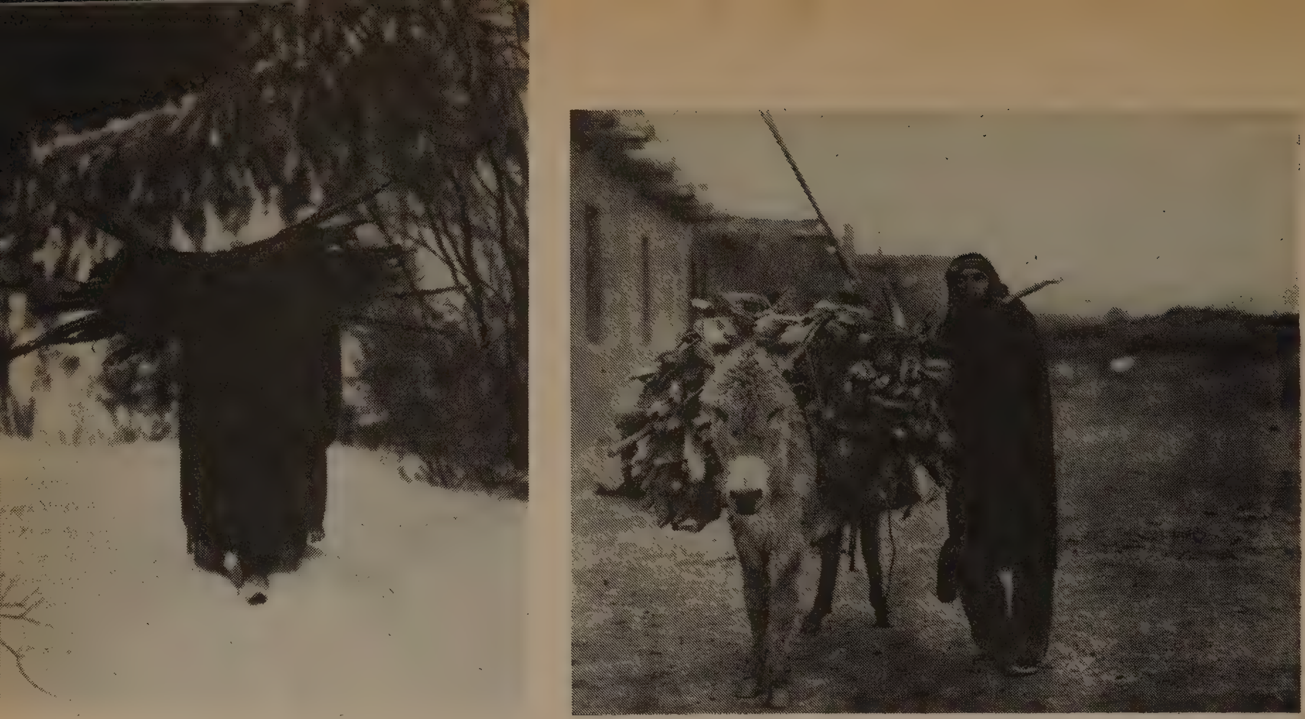
The separateness of tool kits can lead to an extreme division of domains. Pierre Clastre, who has lived among the Guayaki, reports in a moving chapter on such a split world in the Amazon jungle.[5] Women's domain is here organized around the basket each one has woven for herself at the time of her first menses, and the men's world turns around the bow. No personal authority stands above the two domains. The division which is constantly experienced engenders the tension that holds this society together. If ever a woman touches the bow of a hunter he loses his manhood and becomes *pané*. His arrows become useless, his sexual powers are lost, he is excluded from the hunt, and if he does not just shrivel and die, he lives out his life behind women's huts, gathering food in a discarded basket.

There is, however, no need to look into the exotic for cultural knots that tie gender to tool. It is both more convincing and less distracting to look into our own recent past. On close inspection, many of our grandparents' tools still smell of gender; they are not unisex tools like the typewriter and the gas stove, tools for the discrimination against female sex.

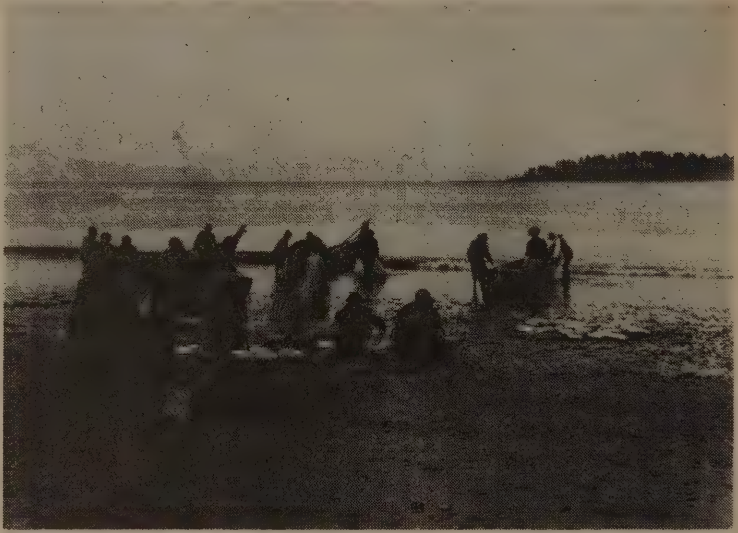
While working on a draft of this chapter, I was the guest of a Quebec baker, a nationalist and artist working with her traditional kitchen tools. She runs a shop near Sherbrooke, and with her cakes offers to her patrons a milieu which is a modern version of a medieval studium, a place of reflection and discussion. She invited me to read these pages to an interested audience in the dining room. The walls were decorated with a dozen rusty farm tools. They had been collected because they were beautifully shaped and locally made. Together, we inspected these remains from households and farms, none older than the century. Originally, they must have had their proper names, but most were lost by now. For some of the tools, no one could even guess their use or purpose. Others were obviously made for digging or sawing, but nobody now knows the crop or wood for which they had been crafted. And no one in this group of young French-Americans knew anything about the gender to which the different tools had been bounded, whether they had been destined for the hands of woman or man. In North America, even in Quebec, gender has been laundered from tools, but it still survives in the tools of many pockets of rural Europe, in some places more than in others. In one region, men use the scythe and women the sickle. In another, both use the sickle, but the two tools are of a different design; the handle and blade betray the gender. In Styria, for example, men's sickles are clean-edged for cutting, and women's are indented and curved, made for the gathering of stalks. The great **Atlas of Peasant Work** of Gunter Wiegelman reports hundreds of different such stories for a confusing variety of spots.[6] In some valleys of the Alps, both genders use the scythe, but she only to cut the fodder, and he for the rye. Here, only she touches the knives in the kitchen; there, both cut the bread, but one cuts down and away, the other draws the blade toward the chest. Almost everywhere, men plant grains. But in one area on the upper Danube, women harrow and sow, and that is the exceptional place where men do not handle the seed stock. Animals are tied to gender, even more than plants. In one place, women feed cows but never the draught animals. Further east, women milk those cows which belong to the homestead, while the herd on the manor is milked by men. Only a few hours' walk further, the same job is done only by maids. Tenaciously, the tie between gender and tool have survived, while wars have swept over Europe, destroying cities, and economic growth has transformed rural life. In the midst of synthetic pesticides, combines, and TV, some old tools have anachronistically preserved the trappings of gender.

More frequently, though, the tie has been broken, in Eastern Europe much more purposefully than in the West. At best, it survives in the memories of the old. A decade ago, I listened to a Serbian peasant telling how haying had been done a generation back. He described gathering, loading, and storing the hay as if the work had been a ballet in which men and women each danced their appropriate figures. While he spoke, we were watching how things are done now. Under workers' control, haymaking has turned into a unisex job which any hired hand can do. With a mixture of sadness and pride, the grandfather looked at the young woman who was driving the tractor of the village commune. The gender that disappears on a tractor had adapted to ever newer conditions over millennia. The tie between gender and ox in some well-documented cases has survived from prehistorical times. No woman ancestor of this young driver would have yoked or fed an ox. This gender trait can be followed back in her people to a time when they neither spoke the same language nor lived in the same part of Europe. . . .

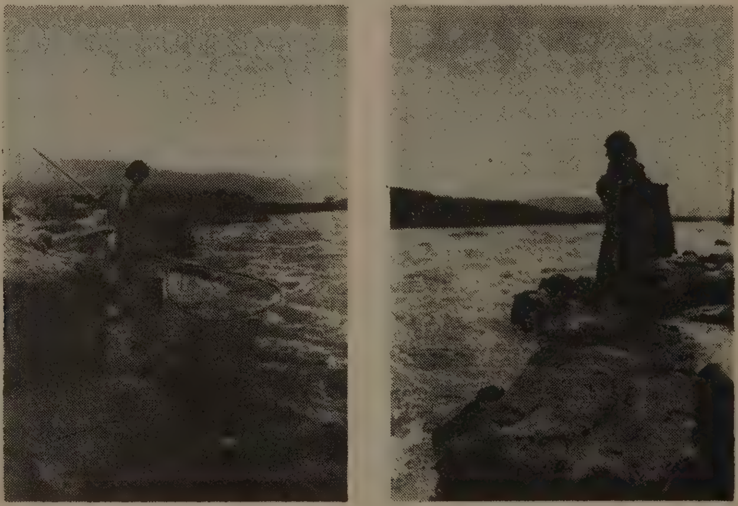
Vernacular gender in the Nuba tribe of the Sudan, who cultivate dura (a sorghum grain). Most of the heavy work in the fields, especially the initial clearing, is done by the men. The women weed and help with the planting. At the time of harvest their job is mainly transporting the heads of grain — first from the field to the drying stack nearby, and later from that stack to the collection point of each village and then (as shown) to their houses. The men thresh the grain. Here, covered in ash, they carry out the first stage of threshing, beating the millet heads with an implement like a polo stick. After the threshing, each woman stores her grain in a granary hut in her compound. She grinds it into flour in another hut where the lower grindstone is set into a mud table. From The Last of the Nuba by Leni Riefenstahl (NWEC p. 42).



"A heavy load (Sioux)" and "A load of fuel (Zuni)." Renowned photographer of Indians Edward Curtis wrote, "Summer and winter the Sioux woman performed the heavy work of the camp, and what was seemingly drudgery was to her a part of the pleasure of life." About the Zuni he wrote simply, "Only a people as frugal as all the Pueblos in the use of fuel could still have an available supply in a region so poorly provided by nature." This is one of the few Curtis pictures where a man is shown doing any work besides hunting and fishing.



The return of the halibut fishers (Makah). The men bring back huge quantities of halibut at Cape Flattery, and the women slice the flesh thin and dry it for storage.



Two members of the Wisham tribe. The man dip-nets in pools of the Columbia river; the woman carries the fish back to the village.

Credit is due the University of California at Berkeley's Bancroft Library for helping dig out these prints from Edward S. Curtis' twenty-volume masterwork, Portraits from North American Indian Life, the first volume of which was published in 1907. A condensed version published in 1972 is available for $10.95 postpaid from A and W Publishers, 95 Madison Avenue, New York, NY 10016.

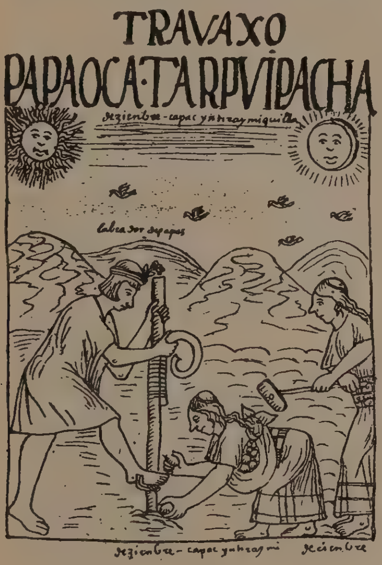
Gender and High Civilization

Trade can have gender. And the trader is not always the man. Nor is there much substance to the commonplace that women trade on the village square and men roam afar. In Malaysia, the western Sahel, the non-Hispanic Caribbean, it is the women who conduct the household's market activities, and the pattern is deeply ingrained. The trade is built on women's contacts with kin, and men have no chance to break into their circuits. Whether the trade is in pottery or jewelry, she is the one who deals with distant villages, while he takes care of the house. To keep the husband in the home, a woman trader might force a second wife on him under the threat that otherwise she would leave him – a threat which even today holds good. He knows that what she trades no one would buy from him, and that the income is needed for the house. Like rent, trade goods also have gender. In northern Burma, no one in his right mind would buy jewelry in the market from a man; it has to be fake for the tourist.

Crafts also have gender, often an intricate one. Not only the crafts of subsistence – potting and cooking in one's own hut, or spinning and weaving to outfit one's camel – but also arts and crafts organized for sale and trade possess gender. One cannot replace the tailor in a North African souk with a seamstress, or where would one find a shoe-repair woman? When the eye is sharpened for the perception of gender, an everyday dish or an ordinary piece of cloth can reveal a pattern as subtle but as real as fine filigree. Fulling, dyeing, weaving, cutting, finishing – each passage required several distinct contributions, some made only by women, some only by men, until a four-handed symphony had been completed on the object.

A couple of recent studies of medieval trades have made much of the fact that many guilds allowed women to become masters. This occurred especially in those trades in which there had been a heavy investment in tools over several generations. Here, widows were sometimes forced to head the team after their husband's death. They were appointed the shop's guardians, as their men had been before them. But to jump from this guardianship of town or family interests to the conclusion that women worked iron side by side with the apprentices, or in competition with them, would be ludicrous – at least until the first historian of gender in guild-bound artisans' tools teaches us the contrary.

Trade and craft are only examples to indicate fields for a history of gender in advanced or high civilization. They remind us that gender is not reducible to a quaint quality of primitive lifestyles which town life, commodity production, or complex marketing cannot but wash from society's texture. Gender thrives in high civilizations. In the urban life of the Middle Ages it combined with the division of labor by crafts and arts into new and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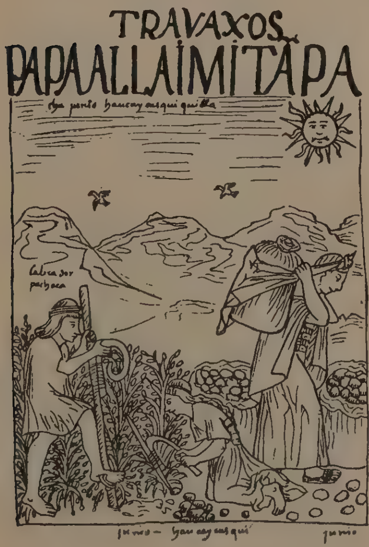
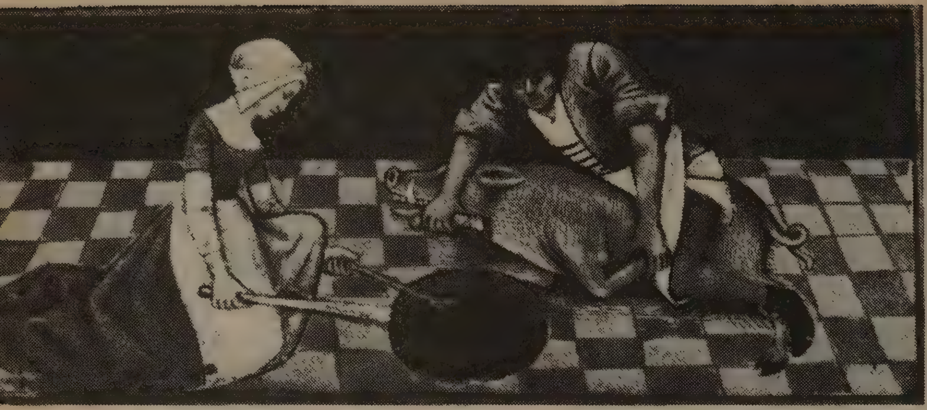


The Andean native man uses a spadelike tool called a chakitacqlla (pronounced chak-ee-tee-ia) to cut the tough sod of the Peruvian altiplano, and the women use mallets to break up the turned sod and, later, a mattock called a raukana for harvesting. This traditional work team is illustrated in its standard configurations here in drawings from Felipe Huaman Poma de Ayala's letter to the King of Spain, Nueva Corónica y Buen Gobierno (probably 1613). In the photograph by Hiram Bingham from the May 1916 National Geographic, similar teams work together as they do today in the more conservative agricultural towns in the Andean highlands.



The web of rural gender complementarity, shown in a French painting of the slaughter of a pig: La tuerie de la Saint-Martin, **from** Heures de Charles d'Angoulême **(early 1600s). Reprinted in** Façons de dire, façons de faire, **by Yvonne Verdier (see footnotes).**

complex configurations which are far more difficult to disentangle than the primitive divide on which anthropologists have fastened. Under the misnomer of women's history of European and Islamic towns, historians have recently begun to claim gender as their subject. . . .

Territory and the Domain of Gender

Homo sapiens has territory like other animals. And he often shares territory with them. But gender is specific to him. Each gender has its own hegemony over reality, and together the two genders constitute what I call the vernacular domain. There are no two societies where these domains are alike, where tools or tasks are divided in the same way. The sharp contour of these sets tells us who does and who uses what. It tells us if women lean on the east or the west wall of the room. But the gender divide and the way it runs does not yet tell us how the two genders relate to each other, on what territories and occasions. As with division, so genders are also interwoven differently in each culture. They can rule separate territories and intertwine rarely, or they can be knotted like the lines in the Book of Kells. Sometimes no basket can be plaited, no fire kindled without the duality of two sets of hands. And in the course of a lifetime, each culture brings the genders together in its unique way. There are places where young men and women come together to live communally for just a few years, and then move out again into territories of their own.

Yvonne Verdier's book on cooking, washing, and sewing in an isolated village is a masterwork, describing from women's perspective the finely wrought tissue of such a web.[7] It is delightful to read her report on the slaughtering of a pig. Only the woman can choose the animal for slaughter, by addressing it as "Monsieur," but the man must set the day for the happening. They go through dozens of appointed steps, as in a minuet. Women prepare sausages and men salt the lard. But while in Minot only old women can pick up salted pork from the larder, a few miles down the road not even they may trespass into this male space. Each village dances its own waltz to the tune of its own regional music.

Martine Segalen, in a recent book on husband and wife in French peasant societies, has broken new ground in describing their complementarity.[8] She carefully analyzes gender-specific tasks in their reciprocal correspondence, and explicitly distinguishes these from roles, status, and rank. She examines, also from a woman's perspective, the architecture of farms and the schedules of farmers; she collects proverbs and photographs and interprets old paintings and ethnologists' reports in order to reconstruct from surviving patterns what things must have been like in the middle of the nineteenth century. What she finds is a relationship between men and women much less governed by family and kinship than by the demands of the household based on the matched interdependence of men's and women's hands. She describes how men and women do their daily work as members of their own gender rather than individual constituents of a couple who are married to form a pair. The coupled pair carries little weight in the nineteenth century French peasant household. Both the myth of rough male dominance and the idyll of a romantic peasant couple miss the mark completely. According to Segalen, it is the household that mediates between the individual and the village community, not the twosome of parents, the couple. If the household breaks down, and its members do not act in accordance with the demands of their respective genders, then the village community will discipline the offending individual directly. For example, in northern France the kitchen garden ought to be hoed in April; and this is woman's work. If by the first of May the ground is still unbroken, a straw man will appear in front of her kitchen window with a mattock in its arms. And should a man notoriously beat his wife he will get rough music: a trip around the village in a wheelbarrow, covered with mud and accompanied by teasing doggerel to the clang of pots and pans. Should he let himself be beaten by his wife, he will be singled out again, tied backwards on an ass with the animal's tail in his hands.

What one feels when offending against the gender line is a sentiment which for contemporaries is difficult to reconstruct, partly because it seems to be as vernacular and, therefore, as "ungrammatical" as that line itself, and partly because it is an experience which faded in the gender. Neither shame nor guilt are quite the words, at least in their present-day meaning. Castan has studied what the people in the Languedoc called *honnêteté* between

1715 and 1780.[9] I shall translate the term as "probity." His research was done on court records of criminal cases and disorderly behavior. This allowed him to tap one of the rare sources for the actual speech of illiterate, low class people. Part of the study demonstrates the way probity kept people acting according to their gender, down to the minutest details. For example, when guests came to the house, *she* had to fetch the glasses, prepare the salad, bring the wine, and listen to every word said without seeming curious and without getting involved in the conversation. This was expected of her, because being one of the women, she had means to make known what was in the interest of the household in ways that are more powerful than the straight speech of men. She therefore committed a fault against her own kind if she joined in men's talk; she would lose the effective power of whisper and gossip. However, it was her task to take the part of her children in an argument, even if they were inexcusably wrong. Probity demanded that she go for the face of the enemy with nails and teeth, if that were necessary. From *him*, probity required the opposite. In the same kind of incident or situation in which she was expected to defend the offspring, he was supposed to correct or punish the child, sometimes rudely.

Le Roy Ladurie has probed the relationship between house and gender in the same southern region of France, but in earlier times.[10] He analyzed the registers kept by the late Pope Benedict XII when, as a young bishop and inquisitor, he submitted several dozen inhabitants of a small mountain village, Montaillou, to rigorous and skillful questioning on suspicion of Cathar heresy. With great refinement, he solicited innumerable details about their daily lives from these peasants and shepherds of the northern Pyrenees, and had verbatim records of their responses prepared. Le Roy Ladurie has analyzed these responses which were gathered for him 650 years ago. No other document I know gives such a comprehensive firsthand description of what a community of householders felt about the roof and territory they shared, and what behavior they expected from and tolerated in each other. Each of the victims of this inquisition comes to life as a person, not only when behaving as the bishop would approve, but particularly when following the dictates of his own gender's propriety in ways that the inquisitor wants to check. And on every page the *domus*, the house, in the strongest possible sense, means the roof under which and the territory on which the two genders meet: the kitchen, the goods and land, the children and the conjugal alliance.

THERE are no two societies where tools or tasks are divided between genders in the same way.

Not people but the *domus* seems to be the subject of history, the basic social unit. The house, at once building and family, links men and women to their possessions, which relate them to each other. From these painstaking interviews between the judge and the Montaillou peasants born in the late fourteenth century, it appears that they, unlike modern peasants, are not yet obsessed by the land and its tenure; it is the *domus* that counts, even more than spouse or child. The *domus*, not the naked family, is subsistent and autarchic; it reproduces itself in offspring. Here, in Montaillou, the women of the house are in charge of fire, cooking, gardening, greens for animals, and fetching of water. The men look after the fields, the woods, and the sheep, getting occasional help from a woman belonging to the *domus*, or one hired from abroad. Material life is created by the house, the main subject of life, through its men and women.

Gender as Vernacular

Gender is vernacular. It is as precarious and as vulnerable as vernacular speech. As happens with the latter, gender is obliterated by education, and its existence is soon forgotten, or even denied. For the high school graduate, his parents' vernacular has become a substandard dialect of the mother tongue which he has been taught. For the daughter who returns to rural Mexico, equipped with her university degree, the gender of her old mother can easily appear as a bondage which *she* has escaped.

The profound contrast between vernacular speech and taught mother tongue is often obvious for the parents and elusive for the son. They realize that the two modes of language belong to irreconcilable worlds. But the differentiation between gender and sex is even more elusive. The main difficulty in grasping it is the fact that both gender and sex are dual, and their contrast is that of complementarities in different planes. Of course, both gender and sex are social constructs. When I speak of "her" gender and of "her" sex, I use a feminine pronoun to refer to a social construct that builds on biological difference; but gender and sex are dualities of different kinds. Gender is substantive, sex is adjective.

Gender is a primary. It is also a social entity, requiring a complement. Only when taken together, like yin and yang, do genders make sense. As in yin/yang, only he who stands on the outside has a perspective in which the black and the white make a whole. This is not true with sex in the economic neuter. In the perspective of the neuter, sex is a secondary attribute, a property of an individual, a characteristic of a human being. The sex role could not come into being until society's institutions were structured to meet the genderless needs of genderless clients with genderless commodities produced in genderless work. The sex role builds on the existence of man. Even today, however, one's sex is not perceived as just one more role, one more outfit to don, one more well-fitting or ill-tailored dress for special occasions, like that of parent, academic, or plumber. Most people consider the sex role less changeable; women know that they are stuck with it in an oppressive way. But, like it or not, to have a sex role – be it assumed, imposed or resented – is something other than belonging to a gender. It is one thing to say that you are a man or a woman, and something quite different that you are of male or female sex. Unlike gender, which means that you are either a square or a circle, the sex role is like a foundation on which other roles can be built. Some people wear their own skin as if it were chosen like either lingerie or skivvies, and beneath it feel skinned, plastic selves. Others view their sex role as a corset into which they were forced by their parents, a foundation on which they can build, which they can change or occasionally discard. As with the vernacular, one is born and bred into gender; the sex role is something acquired. One can blame parents or society for an "assigned" sex role or a taught mother tongue; there is no way to complain about vernacular speech or gender. . . .

Gender and Conceptual Universe

When from infancy men and women grasp the world from complementary sides, they develop two distinct models of conceptualization of the universe. A gender-bound style of perception corresponds to each gender domain of tools and tasks. Not only do they see the same things in different perspectives and hues, but a large part of what each sees the other gender does not know at all, unless such knowledge has become part of the common lore and myth. Edwin Ardener, in the late sixties, strongly made this point.[11] He reviewed some of the earlier fieldwork that had focused on the relative dominance of the right or male half of the representational universe over its left counterpart in women. But then he pointed out that even more fundamental than a possible dominance was the irreconcilably distinct style of existence which distinguishes the mutual but ambiguous relationship between genders from all biological or logical dualities.

THE history of the war on gender is the history of the modern state's war on subsistence.

In the introduction to this paper, written in 1968 and thus still untouched by any polemic with the new wave of feminist studies, Ardener analyzes why women present a "problem" not just to the anthropologist but to anthropology itself. This is so because the models of society that women informants can provide are not the kind acceptable to men or to trained anthropologists. For example, to both male and women anthropologists, Bakweri women define the boundaries of their own world in such a way that they live as women – but only up to a point – in what for Bakweri men is the "wild," and for anthropologists an impenetrable wilderness. "Women do not readily see society bounded from nature; they will not necessarily provide a model for society as a unit that will contain both men and themselves. They may indeed provide a model in which women and nature are outside men and society," a world that thus does not fit the most fundamental assumption of the observer about kinship. If this is truly a women's world, it is a world which cannot be the ancestor of our world in which scarcity reigns. Nor is it a world that is connected with that discovered through men's eyes by ethnographers, a world in which women are the original objects of exchange.

Ethnographers want only the information that men can give who, when pressed, provide a bounded model of society that is acceptable to them, a world that fits, as an ancestor ever so far removed, into that from which the scientist comes, where life is a zero sum game. Only under the assumption of a bounded world into which women are placed by the male dramaturge as "lay" figures can a script be written in which women appear as Levi-Strauss perceives them: as words who, like all words, are meant to be exchanged.

The incapacity of social science to deal with gender complementarity has usually been explained as a secondary form of male bias. This explanation permits the woman anthropologist to offer her remedy seriously and in good faith. Ethnographers, overwhelmingly men, report that women informants are a nuisance: "They giggle when young, snort when old, reject questions, laugh at topics proposed to them," have little interest in speaking to ethnologists, he *or* she, and much of the time are made inaccessible because their men declare them to be dangerous, impure, or in need of protection. It is tempting for the ethnographer to ask men what *they* think. Further, most ethnographers have linguistic difficulties. And men, more than women, are likely to have learned some vehicular language. Ethnographers also like to feed their own models, including their most basic axioms, to their informants, and these informants, while changing, embroidering, or misunderstanding the models in their responses, feed the axioms back, purified, to the ethnographers from whom they came. For these reasons, it seems sufficiently clear why social science has been gender-blind. But, as Ardener points out, an even more fundamental bias is built right into the discipline: anthropo-logy, the science of *mensch*. By its scientific logic, it is an analytical tool that studies men and women as "anthropoi," reduces gender to sex, and makes of a metaphorical complementarity that only the culture's own poets can describe a system of two homogeneous opposites. This raises a more basic question: If science cannot get at gender as a subject, how can it explore anything in the vernacular domain? . . . .

Gender and History

Gender-based existence is a constant adaptation to an ecological niche. With Levi Gurhan, transition from ape to *homo sapiens* can be understood as the unfolding of gender domains within a territory which man shapes with his biological ancestors. With gender-bound tools oriented by a gender-specific world view, vernacular life draws its subsistence in this place. But under the assumption of scarcity, both biological territory and cultural gender are replaced. Biological territory is blown up into a cosmic habitat, and gender-specific fragility is supplanted by a firm "human" claw that henceforth controls nature. The utilization values of the environment, on which vernacular life could subsist, are now enclosed and appropriated to be transmogrified into something else, into resources for the production and circulation of commodities on which people with gelded gender will then totally depend . . . .

Garment workers of both sexes in the industrial Lower East Side of New York. In the first two photographs gender division has evolved into sex discrimination: a man tailors at his shop (1915) and a woman carries piecework home to her sewing machine (1909). In the third photograph (by Lewis Hine), men and women work together in the sweatshop of Mr. Goldstein (1910). Both men and women usually got paid by the piece; women did piecework at home so they could take care of the kids. From Portal to America, Allon Schoener, Editor (Holt, Rinehart and Winston, New York); and A Bintel Brief, Isaac Metzker, Editor (Doubleday and Company, New York).

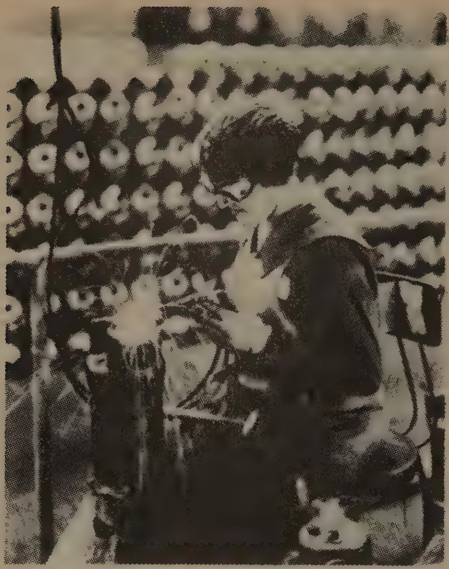
In contrast to the history of gendered existence, a story of delicate balances and tensions, the history of gender breakdown reveals, finally, the victory of sex. It is the institutional history of western society over two millennia, that society's progressive secularization and war on gendered subsistence. It is the history of bureaucracies and professions, of their diagnoses and therapies, of inquisitors, confessors, witch-hunters, gynecologists, psychologists, educators and, now, liberators. It is the history of the process by which men and women were forced for their own supposed good to recognize their common humanity, to normalize their vernacular genders by pruning them down to male and female sex. The history of the war on gender is the history of the modern state's war on subsistence.

What is essential to recognize is the demise of gender through its transmogrification into the sex of modern possessive individuals. And to be able to see the eradication of gender clearly, it is important not to confuse the process with either transgressions of the gender divide or with the evolution of gender.

Gender and Transgression

In all times, we find occasions on which the gender divide was breached. There are, for example, several miniatures from the late fourteenth century which show the women of farmers guiding the plow. Women are reported to have done men's heavy and exclusive work for 15 years, and to have walked behind the then-new wheeled plow. The plague alone cannot explain this transgression, because the plague kills men and women quite equally. There must have been war, in addition to the plague, that took its toll of men. The women had to work the fields until their boys became adults. Private misfortune can also force a peasant to neglect proprieties, especially in instances when he can do so while out of view. Even today, a poor widower will milk the cow if this is done in the stable. But the same man will not hoe his wife's kitchen garden where he could be seen by any passerby. An emergency, too, can authorize an infringement. When the haying is threatened by an approaching storm in a mountain meadow, the owner and his sons may lend a hand to women in their work of gathering the hay, but they could never demand this from a hired man. These exceptions only confirm the general rule.

Paradoxically, transvestism served the same purpose. Carnival seems to demand that



The World War I version: Rosie the Welder. While men went overseas, women entered the machine shop as industrial workers, experiencing their first significant shift from textile industries to the metal trades. Despite promises of being kept on, few women were offered the opportunity to apply their skills once the war was over. Women dropped back into lower-paid work and shadow work. From To Be a Woman in America 1850-1930.

women play men and men play women and men play women who play men. The turnaround means dressing, acting, and talking as members of the opposite sex. Especially during the onset of capitalism, such reversals were occasions for the crowds to resist new hierarchies and forms of enclosure which a newly arrived economic order sought to impose on the people. This turnaround has also consistently served to lampoon and keep in check the relative domination of men over women by putting women publicly and festively on top. But this ritual celebration of gender reversal, for which we find evidence in almost every culture, arguably had as its main purpose something quite different: to keep the gender divide crystal clear by reversing the public perspective on its outlines. Magically, it may have served to surprise the guardian demons of this divide, keeping them both satisfied and at bay.

The contrast between the ritual transgression of a gender divide and the inversion of sex roles has recently come into focus. Authors who have tried to write a history of "the homosexual" in western society have been confused to discover that "his," not even to speak of "her," constitution is of modern coinage. The fact that lovemaking among men or women was more or less frequent in some place and time does not permit the historian to draw the conclusion that all societies recognized "the" homosexual as a special kind of being. Before the Renaissance, a person could no more recognize himself as a homosexual than as a poet – he preferred boys to women, or he was skilled at writing verse. A man could be as addicted to buggery as he could be of violent temper and kill; he could be called a bugger or a beast, but neither designation touched his being. Making love to men did not make one intrinsically other. Homosexual acts were recognized and each culture had its own way to appraise them – as ritual inversion, as a form of dangerous or beneficial magic, as a vice to be tolerated or to be violently repressed. As a special identity, the homosexual just could not be conceived.

Gender and the Church

In 1324, Arnaud the subdeacon was completely taken by surprise by the examination of the inquisitor of Montaillou. He gave expression to his bewilderment in evident good faith: "I thought . . . in the simplicity of my heart, that sodomy and ordinary fornication were indeed mortal sins, but much less serious than the deflowering of virgins, adultery, or incest." This Arnaud was of noble and urban origin. He was sophisticated and literate in a worldly sense. At a time when it was extremely rare to own a book, he loaned books to others. Among the volumes he handled, one finds not only Bibles and calendars, but also classics; he had an Ovid, an author who transmits detailed classical knowledge on the theory and practice of love. And although Arnaud had never been ordained to the priesthood, he carried out his clerical duties with evident devotion. His responses, given at the beginning of the fourteenth century, still reflect a gendered perspective. But from about this date on in western culture, such a view was persecuted from above. His inquisitor's concern with his sodomy, now interpreted as a profound deviance, as a heresy, remained beyond his grasp. For him, sodomy was and remained just one of several ways of curing lust.

The inquisitor speaks for the Church, for a new and rising Church which, soon to be secularized and split, would take form in the contemporary professional establishment. His inquisitor belongs to a Church which had succeeded in transforming Mary, the mother of God and the blessed one among women, into "the only one of her sex." He belongs to the church which made over the ritual of penance into the yearly act of confession, a church which only recently – in the Lateran Council of 1215 – had imposed on all her faithful the duty of telling their sins once a year to their own parish priest. This new law had been introduced with an original formula which reflected a novel perspective, the homogenizing perspective of sex: *omnes fideles, viri tantum ut mulieres* – all the faithful, men as well as women, are henceforth held to speak every year to their appointed pastor and to reveal their sins. To enable the pastor to listen to these confessions, a new literature had come into being during the preceding century, a literature that had not yet washed Arnaud. Manuals advised the confessor what questions to ask the faithful to help them to discern (diagnose) their own sins, which were now reduced from being offenses against God to being deviances from a law which binds not genders but souls. Church law was not sexist by reserving power, privilege, and ordination to men; it simply reflected its sources. Church law *did* pioneer sexism by ruling on the consciences of equally immortal souls. By equating, in terms of sin, the transgressions of the same law by both men and women, it laid the foundation for sexist codes. Sex, not as a term but as a concept, appears here as the category under which all kinds of sins can be thrown together under the heading of the sixth commandment: thou shalt not commit adultery. . . .

Within the context of the household, the deviant individual became the object of inquisitorial diagnosis and care. The Inquisition then turned into a vast crusade designed to achieve early diagnosis of each deviant cell, of each person smelling of heresy. In this context, the term "bugger" is first used with its new meaning, one that imputes a warped nature rather than sinful behavior. The medieval shift of orthodox views on God to catholic standardization of everyday behavior, the conversion of priests from men deputed to the service of God into pastors and confessors of a flock composed of two sexes, supported the new identification of sexual buggery with theological heresy. For the pastor, now represented by the image of the celibate cock on the steeple, the bugger was the unredeemable enemy who had eventually to be burned.

The *plebanus* looking down from the steeple upon his people, the sheep entrusted to his care, is the prototype of the service professional. He is in charge of souls and equipped with the language to read their consciences. All the souls which are his responsibility, he is taught, are of equal dignity, and they have a conscience to be examined, formed. His flock must learn to do this through standardized formulas which are the same for all, up to the sixth commandment. At this point, the propriety of genders is reduced to human conscience and to sex. The gender gap has been institutionally bridged. All the flock's souls are equally dear to Mother Church; not, however, their sex. Crudely but clearly, in the pastor's perspective the sex role has replaced the complementarity of gender. A new universalist (in Greek, *catholic*) world can now be designed. It is a world of equally worthy human beings, subjected in their conscience to the same law.

> **No matter how much the gender-defined work of women might seem subordinated to that of men, the notion that men could direct women in their work itself had so far been unimaginable.**

Half, however, stand in desperate need of more help and guidance from Church, state, and family. The Church's care of souls had established the precedent for the future state's care of people.

Gender and Industry

The medieval pattern, arranged for the spiritual care of souls, formed the foundation for the exercise of a new kind of clerical power, one which moved from the care of genderless souls to the custody of genderless humans. The medieval institution necessary to carry out this "responsibility" could be maintained on the surplus pressed out of a material life subsisting mostly on gender. But the satisfaction of "human" needs – the rationale for the industrial state – could never be financed out of the surplus from gender-bound vernacular cultures. Therefore, the coexistence of human beings in a commonwealth required the destruction of gender and its replacement by unisex work. . . .

Now, let me cut to the Lutheran village of Wurthenberg, where we can witness the reaction of men and women to the replacement of gender by sex, in this case, by unisex work. Between 1800 and 1850, the unusual number of four dozen divorce proceedings were recorded in the small village. Sabean has tried to interpret the grounds given for the dissolutions, grounds unlike any adduced in earlier times. To understand what had occured, he had to consider the economic transformations of the region during this period. The railroad was being built, tenancy was being altered, and most of the families were being forced from homesteading toward producing cash crops from fruit trees. Orchards spread, replacing fields and gardens. Putting in and harvesting the cash crops proved to be more labor intensive than homesteading had been. And the change occurred in one generation. Women were suddenly forced to join men in men's work to make enough family income to buy what had formerly been grown in the garden plot. They were also forced to reduce the time devoted to their own work in the kitchen. The divorce proceedings reflect how deeply disturbing the innovations were for both men and women, how helpless each felt, how unable to understand the implications of their seemingly rational decisions. Women complained that men suddenly ordered them around at work, a totally new experience for them. No matter how much the gender-defined work of women might seem subordinated to that of men, the notion that men could direct women in their work itself had so far been unimaginable. Women also complained that while men had time after work to relax at the inn, they had to hurry home to the kitchen. Envy of a new kind thus appeared, an envy destined to remain as a central characteristic of modern life, an envy fully "justified" under the assumptions of unisex work but unthinkable under the shield of gender. And with great regularity, the men complained that their women were inferior to their mothers; formerly, their diet had been rich and varied, now they had to eat knoedel day after day. In this microcosm, we see vividly how the new script for the industrial age was to be written. For the drama to live and move, the stage had to be peopled with actors of homo- and heterosexual constitutions who were also economically neutered workers.

In most versions of the modern drama, a short intermission separates gender from sex. It separates the reign of gender, where the household obtains its subsistence from the apportioned tasks accomplished by two sets of noninterchangeable hands, from the regime of industrial economics, where genderless hands produce commodities in exchange for pay. During this protoindustrial intermezzo, unisex work, to be performed in the home, is forced on the household. Thus the latter is transformed into a mill where gender is ground down until only sex is left. The sufferings which the crushing of gender caused both men and women have often gone unreported. Two reasons can be offered for this. First, the new experience of economic misery which afflicted the proletariat was highly useful to both capitalist and revolutionary. Second, the obliteration of gender constituted something quite different in each region; few possessed a language suitable for translating the subtleties of vernacular variety of pain.

While the stage for factory labor was being hammered together, and a modern economic set was being constructed, but before the script was rewritten for the new and unfamiliar sex roles, a novel critical theory was being conjured up for the avant-garde theatre. The genius of Marx and Freud can be appreciated only by him who sees how early in the development of the modern drama they defined its rules. They forged the definitive concepts which would be used to describe *and* orchestrate the new kind of actor, industrialized "man." Seven hundred years earlier, the Church had imputed a genderless aristotelian soul to sexed Christians. Now the new canonists fabricated their theory of secular man and his salvation on assumptions derived from chemistry and fluid mechanics. In this man, they claimed to find a genderless power which, as capital, circulates through social conduits and, as libido, through psychological channels. Further, the generalized power nicely fitted the latest genderless plumbing arrangements. . . .

Economic sex: Just after punching out, male and female factory workers explode from the doors of the Western Electric Merrimack Valley telephone-equipment-making plant. From Clockwork, by Richard Balzer (Doubleday and Company, New York).

IV. THE ECONOMIC NEUTER AND SCARCITY

WHETHER THEY ARE BORN out of the matrix of gender or educated into the matrix of sex, women must face men. Each matrix, however, endows them with a different relative power. Under the reign of gender, men and women depend on each other; their mutual dependence sets limits to struggle, exploitation, defeat. Vernacular culture is a truce between genders, and sometimes a cruel one. Where men mutilate women's bodies, women often know excruciating ways to get back at men's feelings. In contrast to this truce, the regime of scarcity imposes continued war and ever newer kinds of defeat on women. Under the reign of gender women might be subordinate, but in *any* economic regime they are the second sex. They are forever handicapped in games where they play for genderless stakes and either win or lose. In these games both genders are stripped and, neutered, the man ends on top. No wonder that it is the woman who now "discovers" the transmogrification of gender by economics. Typically, she complains that "she" is invisible to others and to herself. She can neither perceive herself in the regime of economics as an equal partner nor recognize herself in a gender. The turgid fantasies of political science, resting on the assumption of the equality of all men, do not apply to her. In this essay, however, I have not tried to explain why society places the man on top and the handicap on the woman. I have controlled my curiosity in order to be free to listen more attentively to the report of the losers, to learn not about them but about the battlefield which is the economy.

Industrial society creates two myths — one about the society's sexual ancestry, and another about the movement toward ever greater equality. Both myths are unmasked as lies in the personal experience of the neuter of the second sex. However, not only subjective experience but historical revisionism now exposes the founding lies of the economy. Within the professions which launched the myths, the sons now challenge the fathers. The past which has been fabricated for our economies by the great historians from 1850 to 1950 is being reviewed, above all by the historians of economics and by the historians of economic perceptions. The former have let us see the ideological process through which the axiom of economics were expressed since the seventeenth century. We can now follow the process by which "man" was defined as an individual, supposedly acting on considerations of marginal advantages in a social universe where whatever has social value is ipso facto assumed to be scarce. The latter have revealed the popular resistance to the spread of institutions built for the paradigm of the possessive individual, *homo economicus.* They describe the sabotage against the state's efforts to control behavior, diagnose deviance, grasp the commons. They tell us of crowds rioting everywhere to protect the local moral economy against the imposition of scarcities. These two new disciplines now converge. They make it possible to speak about scarcity as a historical subject. They understand the Industrial Age as a queer exception to all other known periods; they call it the Age of Scarcity.

> VERNACULAR culture is a truce between genders, and sometimes a cruel one. The regime of scarcity imposes continued war, and ever new kinds of defeat on women.

I set out to argue that the struggle against sexism converges with the fight against environmental destruction and the radical monopoly of commodities because economic shrinkage is the basic condition for all three. The contrast between subsistence on gender and dependence on scarce products establishes the argument.

The regime of scarcity could come to rule only on the assumption that "man" is individual, possessive, and, in economic matters, neuter – a rapacious *neutrum economicum.* I have argued that only economic contraction can ameliorate this malady. I have no plans for the future.

As the ascetic must meditate on death to enjoy with gratitude the exquisite aliveness of the present, so we need to face the sad loss of gender, simultaneously renouncing the comforts of economic sex. I surmise that only such austere and clear-sighted acceptance of our double bind as economic neuters can give rise to a contemporary art of life. The hope for such a life depends upon the rejection of sentimentality, and the humble openness to surprise. ■

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What to Name the Children When He's Kept His Name and You've Kept Yours

by Jeanette Germain

NO ONE QUESTIONS the fact that many women now keep their last names when they marry. We all recognize that women shouldn't automatically give up a piece of their identity in order to express a commitment to a long-term relationship. Most couples now discuss the issue before they marry. Some women keep their names. Some prefer their husband's name. Some husbands even prefer their wife's name.

But few couples, as far as I can tell, ever talk about the last names their children will carry. A mother may choose to keep her name separate. But the children, it is assumed, need *one* family name. And that family name is usually the father's.

Why don't couples consider other alternatives? Why isn't this topic as burning an issue today as maiden and married names were a decade ago?

I asked these same questions at a family wedding about five years ago. One of my female cousins had just married and had decided to keep her maiden name. Most family members thought that was a sensible choice. After all, she was already known in her profession by her maiden name.

But in the next breath, my uncles began talking about who would pass down the family name. They began urging my male cousins to take action on this important matter.

I wondered why none of my female cousins were being included in the conversation. Why shouldn't women be able to pass down a family name, I asked.

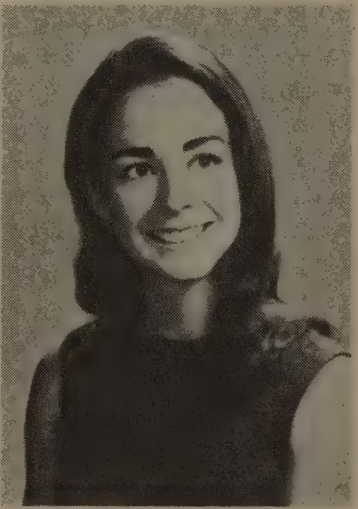
Nobody had an answer for me. My customarily gabby family couldn't even talk about the subject. Everyone was so dumbfounded by my suggestion that they forgot to ask how I proposed to carry it out.

I wasn't sure myself at the time.

I like my name and don't want to change it. But until that wedding five years ago, I hadn't really thought about the children I hope to have. I wouldn't want them to automatically have their father's last name. They will be my children, too. But I can't name them after me, either, without substituting a one-sided maternal society for the one-sided paternal society I'm rejecting.

So what are the alternatives? I considered Latin, English, Icelandic, and even science-fiction solutions before finding my answer.

The author is a 32-year-old writer who lives in Boise, Idaho.
—Art Kleiner



Jeanette Eloise Germain, photographed in 1968 at age 18, and her matrilineal ancestors:

Jones Germain

I had studied Spanish, so I knew something about Latin names. I knew that in many Spanish-speaking countries a person's full name includes a surname followed by the mother's name. So if I marry a Mr. Jones, our children could be named Jones Germain. The drawback is that the mother's name often isn't used familiarly in those countries. Multiple names are shortened and the woman's name is dropped. The same thing would probably happen here.

The mother's last name is her father's, anyway. So double Latin names are still patriarchal and not too successful.

Germain-Jones

In this country and in England, there is a tradition of hyphenated or double last names. When the Mountbatten-Windsors first joined their names that way, the partnership of two aristocratic families was enhanced. Adela Rogers St. Johns decided early in her journalistic career to use both her maiden and married name because her readers already knew her as Adela Rogers. Now television stars (Farrah Fawcett-Majors) and many of my friends are using the same solution.

Her mother, Mary Josephine Moore (Germain), at the same age in 1948 . . .

But I'd like to see both the father's and mother's name carried down through the generations. Hyphenated or double last names are uncomfortably long for most of us, even in the first generation. By the second and third generations, they would get ridiculous. What if my friends Kent and Karen had hyphenated their last name to Little-Pressman, and their child used that full last name?

Their child might then marry my child, and their child would be a Germain-Jones-Little-Pressman. Forget that approach.

Germones, Jomain

Innovative couples, I learned, have attempted to simplify matters with hybrid names. Germain-Jones, for example, could become Germones or Jomain. But that sounds silly to me, and the combinations down through the generations might get worse. All those changes would dilute the personal and family identity that I value.

Hybrid names would also bring me back to changing my own last name. I don't want to do that.

Her mother, Margaret Eloise Garber (Moore), at about the same age (20) in 1920 . . .

Pat or Chris or Randy

I could give my child only one name, I considered, eliminating the last name altogether.

That extreme solution was suggested by Ursula K. LeGuin in her science-fiction novel **The Dispossessed** (NWEC, p. 378). In this utopian nonsexist book, the people of the planet Anarres have only one name each. It is selected by computer at birth so that no two individuals will share a name. The names are unique and also genderless. Because a name indicates no gender or family heritage, it discourages discrimination on either basis. You can't tell from an Anarres name the sex or parents of an individual.

The idea interests me, but it goes too far. I look forward to picking out masculine or feminine names for my children. I think they will be identity assets for both the boys and the girls. I would also be uneasy about subjecting my children to the confusion of having no last name in a "last name, first name, middle initial" culture.

Jeanettesdottir

Iceland finally brought me to the verge of a solution. Everyone is identified primarily by the first name in Iceland, but everyone also has a last name. For men it works this way: Magnus has a son named Einar whose full name is Einar Magnusson (son of Magnus). Einar then has a son he names Johann, who becomes Johann Einarsson. Johann fathers a son, Sigurd, who is Sigurd Johannsson.

Her mother, Mary Josephine Bridges (Garber), at about age 43 in 1902 . . .

I thought that Icelandic girls might be named in the same manner – as daughters of their mothers. So Gudrun would have a daughter Anna and would call her Anna Gudrunsdottir (Gudrun's daughter). But it doesn't work that way. Gudrun is Olavsdottir (her father's daughter). If Gudrun marries Kristin Gudmundsson, she does not take her husband's last name. But her daughter takes the father's name and becomes Kristinsdottir.

The Answer

Iceland nevertheless brought me to an answer. I was certain by then that I wanted both matriarchal and patriarchal names for my children. It doesn't matter to me that men have lineage expressed directly by their name – if women have the same thing.

It's really very simple. *Daughters should have their mother's last name. Sons should have their father's.*

The family heritage that I value so strongly wouldn't be diluted by the change. Men would continue to see their names passed down through their sons as they have always been. The change would make little difference for the men, because their daughters might not keep their fathers' names in marriage anyway.

And her mother, Jeanette's great-great grandmother Margaret Eliza Abrahem (Bridges), photographed circa 1880, age unknown.

And for the women, I see the gains as important. For the first time in recent western history, daughters and granddaughters could have a visible lineage of their own. They could have a clear identity and heritage as women. They could have *one* last name.

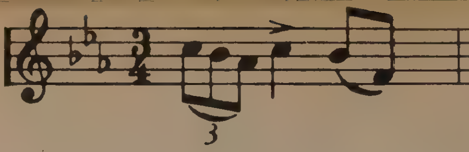
My only hesitation would be in beginning with a patriarchal last name – my last name is my father's. But tracing my female ancestors back even four generations was very difficult. Each generation has maiden and married names. I would probably have to trace back to prehistory to find a matriarchal name, if I were able to find one at all. I finally settled on "Germain" as a good last name to begin with. It was originally the name I wanted to keep anyway.

The little research I did into the names of my female ancestors also revealed a female lineage carried through first and middle names. I was named after my grandmother, who was named after her grandmother. My mother was named after her grandmother.

I'm very pleased with that discovery, but it took me 26 years to find. If the women in my family had all kept one last name, I would have known my my maternal heritage sooner.

Now I look forward to having a daughter of my own. I want to name her after her grandmother and after me. I hope to find a partner who will be amenable. This approach to naming children seems reasonable to me.

Does anyone else agree? ■



J.J. GRANDVILLE

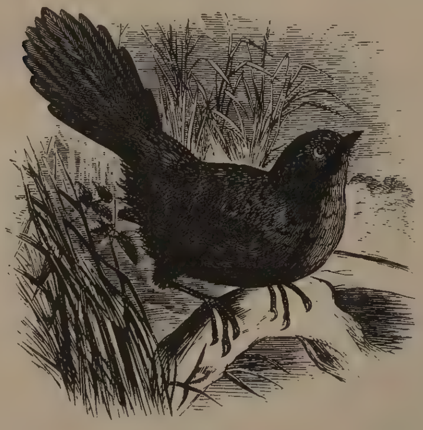
J. J. GRANDVILLE (1838)

Female Birds Do Sing

by Ida Geary

I RECENTLY TURNED OFF a rerun of a **Nova** television special on birdsong, otherwise interesting, but I could not stand their constant repetition that female birds don't sing. I've known for a long time that females sing; why don't others know?

I have seen female birds sing — the wrentit which one sees and hears in the chaparral in California sings: the male calls in a loud clear monotone and the female answers in a loud clear monotone, but her last few notes drop slightly down the scale. These are called "duet birds," and I know of others.



EDWIN L. SHEPPARD IN NORTH AMERICAN BIRDS (1874)

Wrentit, *Chamaea fasciata*

Some 20 years ago I was at Pinnacles National Monument in central California with Dr. William Maher, my ornithology professor at San Francisco State and an authority on jaegers in northern Alaska. We were watching a house wren build a nest in a dead branch of a live oak tree. She was hurrying back and forth with nesting material in her bill when suddenly she dropped it, stopped building, and began to sing. The song was a hurried one, fast and bubbly.

"Female birds don't sing," said Dr. Maher, "so this is a male bird." And we all submissively changed our field notes from "female bird" to "male bird."

But I wondered. Even though it was before the latest high waves of women's liberation, I was already aware of evidences of male chauvinism in ornithological literature.

For instance, the scientific term for the female crouching posture during courting is "soliciting." That sounds to me like the legal term for what women can get arrested for when they are caught doing it on the street. Since bird courtship, like human courtship, is a two-way affair in which both mates make moves and often the male's move is first, I thought "soliciting" was a loaded term. So I hit the books for references to the perching, or singing, birds. I found that in one-third of those species the female is known to sing.

Sorry to say I have lost my notes since then. But all the ornithologists on the **Nova** program were males, mostly young and bearded, and when one described a female bird as "drab and untuneful" I knew not much had changed in ornithology departments since I was an undergraduate.

So I called Point Reyes Bird Observatory north of San Francisco and talked to the young woman who answered the telephone. She was immediately interested in my question — Do female birds sing? — and soon Bob Stewart, one of the biologists there, called me back.

It's an interesting question, Bob said, but no,

This was sent in by a Bay Area writer/artist who teaches plant identification at two nearby colleges. "I was a bird watcher before I was a plant watcher," says Ida Geary. "Now I watch both birds and plants, and I watch people who watch birds and plants, and I also watch people who watch mushrooms. I think people look like what they watch."
—Art Kleiner

female birds don't sing. The wrentit does, yes, and the white-crowned sparrow sings during breeding season and also has a wintertime song. And the bushtit female makes the same sounds as the male. But no, generally females don't sing.

We agreed that the male sings to mark off territory and to say "I'm a male" to attract the female (who then solicits him, I reminded Bob). And we agreed that most ornithologists are male, and that the young woman and I were very interested in the question and he only mildly.

Well, maybe in Africa, or South America, Bob added; they have lots of crazy birds there.

Helen Pratt, a friend of mine who has been doing a heron nesting study at Audubon Canyon Ranch, says that human maleness has seemed to blind ornithologists to some aspects of bird behavior, particularly infant behavior which later becomes incorporated in courting behavior. For instance, the begging posture of the young perching bird for food — wings fluttering outspread and head upraised with bill open — later becomes a courting posture in the full-grown bird. This can be compared with kissing in humans and other mammals. The male ornithologists, she pointed out, tend to see only aggression.

A few women professional ornithologists are beginning to appear and perhaps having more women in this science will affect the way we see bird behavior. I know this is not exactly a burning question, but my feeling is that if female birds sing, then people shouldn't keep on saying they don't. ■

Bushtit,
Psaltriparus minimus

𝄢 Female Birds Always Sang

by Peter Warshall

I don't think male chauvinism has much to do with the folk belief that only males sing. In fact, it used to be thought that only females could have such beautiful voices. As recently as the 1930s, T.S. Eliot included a lady nightingale singing at night in one of his poems. For better or worse, male humans disproved that female birds were the only bird singers, proved that the great courtship songs were mostly male solos, and investigated all the exceptions to the present-day folk belief that only males sing. Perhaps the question is: How can we create folk beliefs with a richer complexity and grasp of the diversity of the natural world?

This is not the place to argue details. But from the late 1930s on, male ornithologists have investigated and written about female singing. The most widely read book on birdsong, A Study of Bird Song by Edward Armstrong (1963, 1980, 2nd Edition; $7.95 postpaid from Peter Smith Publisher Inc., 6 Lexington Avenue, Magnolia, MA 01930), dedicates a whole chapter to female birdsong and duetting. As Armstrong says: "The potential songfulness of the female has been suppressed because among birds, as in human society, division of labor is advantageous." In extreme cases (see "Viva la Phalarope"), when there is a role reversal and the male performs all domestic duties, then only the female sings. Among resident birds who keep their wintering grounds or live in the luxury of mild climates, both sexes may sing (robins, mockingbirds, wrentits, butcher birds, bellmagpies, cardinals, poor-wills, etc.). Some birds (crossbills, swallows, etc.) who have less interest in geographic territorialism but strong interest in maintaining sexual relationships evolved equally vocal sexes. Finally, some females have a "song latency" that appears under unusual circumstances (hormone injections with male steroids, old age, caged isolation, or hormonal disease).

Mockingbird, *Mimus polyglottus*

In the end, all science does see through culturally colored glasses. Even more, the media only reports what the culture craves. But in birdland, with many exceptions, courting males are generally more prettily colored and/or sing the more beautiful song.

VIVA LA PHALAROPE

There are about 8700 living bird species. Most of them are monogamous — many for life. In addition, most raise their young cooperatively or leave incubation, feeding, and education of the young solely to the female. But lovely Nature never lets you sit tight on a generality. Take the Phalaropes.

These small shorebirds fly in the face

Whole Earth *Natural History Editor Peter Warshall responds to Ida Geary's article.* *—Art Kleiner* of your usual avian division of labor and aesthetics. The female is larger and more brightly colored than the male. She arrives first at the breeding grounds (the newly thawed boggy pools of the arctic tundra), claims herself a territory, and sings persistently to advertise her presence. Her body is striking, with contrasting swatches of brick red, black, white, and subtle grays. With her long, thin bill, she vigorously attacks other females that visit her pond, flying at them with a flutter of long pointy wings, calling in flight, and, after dropping onto the water surface, threatening with her head snaking forward, parallel to the water.

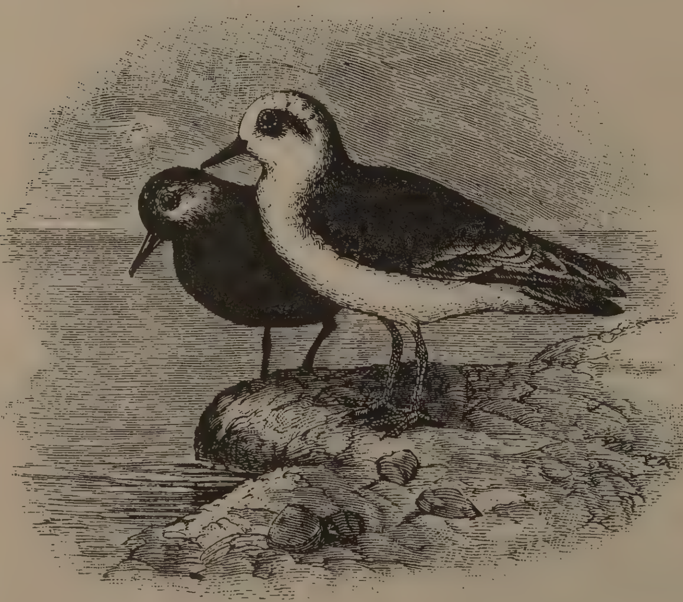
When the males arrive, she attacks them as though they were females. But about a foot from the threatened male, she shows a change of heart. She raises her head, straightens her neck, almost haughtily, and swims away. This courtship — threats and high-head turnabouts — alternate until she accepts the male to be her mate. The female, sometimes with the male's help, scrapes a number of depressions in the driest earth along the shoreline of their tundra boudoir. They copulate and she lays four eggs for him to attend.

Lady Phalarope then leaves and flies south to her oceanic or inland lake retreat. The male remains. He develops a brood patch (an area of the breast with fewer feathers and many blood vessels near the surface) which will help keep the clutch warmer. He is solely responsible for the incubation and feeding of the young.

In addition to this reversal of courtship, size, beauty, and labor (she still stands beneath the male during copulation and lays the eggs), female phalaropes may take more than one male mate. In years of abundant food and surplus males, the female phalarope may not wait for the first male to start brooding. She may try to attract and to mate with more than one male at the same time. We may be witnessing the evolution, under the "right" ecological circumstances, of monogamous role reversal changing to "sequential polyandry" (female mates males in sequence) and, finally, to "true" polyandry (female mates many males simultaneously).

THE WHY OF PHALAROPE LIFE

Science is obsessed by completely harmonizing the details of each bird species' life with the theory of evolution. Luckily for the future careers of ornithologists and grant writers, the quest never seems to end. Lately, "information" (genetic and learned) and "energy" (physiological and ecological) have become the bywords of the good scientists. For birds, the significant energy drains include migration, moulting, and breeding. Breeding needs energy to make eggs (large, small, many, few, richer or poorer in yolk), to burn up food to warm the eggs, and to forage and feed the young.



FRANK H. KNOWLTON, BIRDS OF THE WORLD (1909)

Red Phalarope, *Phalaropus fulicarius*

How to explain the very peculiar life of the phalaropes? First, we can only vaguely sketch their genetic blueprint. They are a branch of shorebird that has given up picking and probing around along the shore or in grassland (although some phalaropes still do a lot of this) and instead specializes in feeding in the water, especially shallow water. More than picking, pecking, and probing, both sexes spin together to stir up shallow waters and then eat the food swirling around in the eddies created by their own spinning. From the energy point of view, this means they are more dependent on aquatic life than terrestrial life for food. In the tundra, phalaropes must harmonize their breeding with the fickle fluctuations of pond life: spring thaw, rise in water temperatures, last year's breeding success of insects and crustacea, unusual summer freezes, etc. This insecurity sets the stage for the phalarope lifestyle.

First, the short breeding season means that egg failure cannot be recouped by laying a second clutch (except during very favorable summers). This liberates the female from waiting around to see what happens to her eggs: staying won't help make more young'uns. Second, a limited and erratic food supply means that males and females may compete with their young, so getting the kids fat, feathered, and fueled for the trip south requires a parental sacrifice. Because, among phalaropes, pop is smaller than mom and needs less food, the solution has been that mom leaves, saddling pop with the domestics. Pop leaves as soon as the kids can make it themselves.

Why mom leaves and pop doesn't is still argued. Mom may be larger than pop because she can't be too small and still fabricate four eggs. Pop, on the other hand, can be small. So, big mom (the gobbler) leaves the task to little pop. In addition, mom is worn thin by making eggs, which is one of the most energy consumptive moments in a bird's life. She is weak and more susceptible to disease, cold, and perhaps predation. She needs a lot of food to recoup strength and then warm eggs and feed young. Phalarope strategy, in the insecure world of the tundra, seems to be: send mom south so she will eat, grow strong and be fit for next year.

Role reversal evolved as one solution to this unique division of energy expenditure and labor (other tundra birds have other ways). Role reversal reinforced mom's bigness, singing abilities, territorial toughness, color brightness and early migration pattern. It still does. It hinged on her genetic karma: she and only she could make eggs. ■

The Grand Domestic Revolution

Nothing like reading history to discover some new ideas. **The Grand Domestic Revolution** *chronicles a cause of such radical simplicity and common sense that you wonder why it was so ineffective and became so obscure. It was called material feminism. It was a major part of the women's movement from the 1840s to the 1920s. The issues were wages for housework and redesign of the built environment. There was little emphasis on equalizing sex roles. The idea was to design neighborhoods or apartment hotels where cooking, laundry, and child care could be done and paid for cooperatively.*

Few of the visions were realized — Hull House, Jane Addams' settlement house in Chicago, came close — because neither the money nor the support existed. Manufacturers grasped early on that they'd sell more washing machines in suburbia than in socialist utopia, and material feminism was crushed in the red-baiting of the twenties. Yet its ideas are still fresh; the pioneers were brilliant, and the encounter this cleanly written book provides is fascinating. Plus there's that old familiar shock of recognizing what thin soil this country is to seeds of social change which threaten profit.

—Stephanie Mills

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At the end of the 1920s, **Woman's Home Companion** turned from advocating that women form producers' cooperatives and warning them against domestic appliances which did not meet their needs. Its policies like those of other women's magazines, were bending under the impact of its advertisers. Advertising and marketing firms spent one billion dollars to promote private domestic life and mass consumption in 1920; their annual volume had risen over 1000 percent since 1890, and continued to rise throughout the 1920s. Stuart Ewen has shown how cleverly advertising copywriters interwove the rhetoric of women's liberation with arguments for domestic consumption: vacuum cleaners gave women new life, toasters made them "free."

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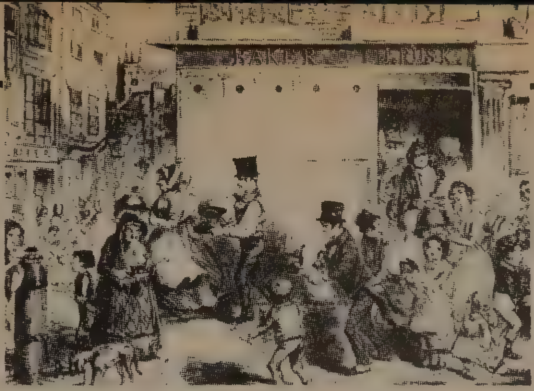
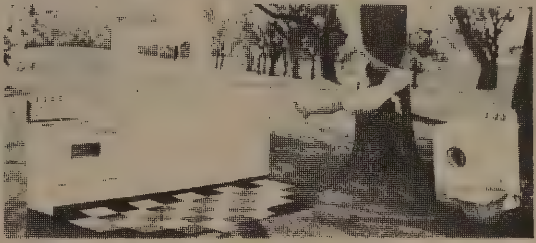
The exclusion of men from responsibility for domestic work — in either private or socialized forms — ensured that male displeasure was the reason most cooperative housekeeping experiments faltered after a few months or years. Men compared private domestic service with socialized work and found that private, unpaid labor was cheaper and more deferential.

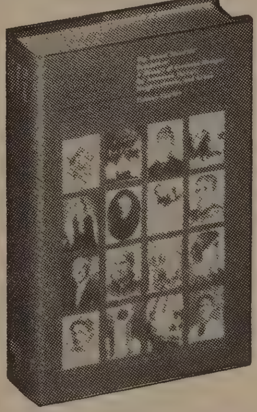


Neighborhood residents carrying roasts and puddings home after using the local baker's oven, London, 1848.



"Swing through spring cleaning with Ajax," advertisement, Good Housekeeping, April 1965. **A surreal vision of the home as workplace, showing domestic machinery in a garden setting and suggesting that housework is play, both themes typical of the domestic mystique of the post-World War II era.**

The Grand Domestic Revolution
(A History of Feminist Designs for American Homes, Neighborhoods, and Cities)
Dolores Hayden
1981; 375 pp.
$19.95 postpaid from:
MIT Press
28 Carleton Street
Cambridge, MA 02142

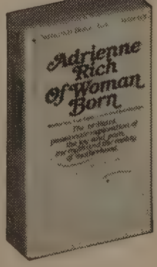


Of Woman Born

Poet Adrienne Rich gathers feminist theory in history, science, psychology, spirituality, and mythology to support her investigation into "motherhood as experience and institution." Using for comparison her experience as a mother of three boys, Rich traces social evolution through the relationships between men and women. She starts with the primal relationship — mother and child — and shows how the quality of motherhood has changed through the centuries. I was amazed to learn that men and women related to each other better and more equally in past times, and that women's struggles to gain equality have often been to recover freedoms they have lost. An important book for women, even more so for men.

—Annette Jarvie

Of Woman Born
(Motherhood as Experience and Institution)
Adrienne Rich
1976; 328 pp.
$5.20 postpaid from:
Bantam Books
414 East Golf Road
Des Plaines, IL 60016
or Whole Earth
Household Store



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As late as the 1920s, it was assumed that "the suffering which a woman undergoes in labor is one of the strongest elements in the love she bears her offspring."

It was therefore a radical act — *the* truly radical act of her entire reign — when Queen Victoria accepted anesthesia by chloroform for the birth of her seventh child in 1853. In so doing she opposed clerical and patriarchal tradition and its entire view of women; but her influence and prestige were strong enough that her decision opened the way for anesthesia as an accepted obstetrical practice.

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Abortion legislation has always come and gone with the rhythms of economic and military aggression, the desire for cheap labor, or for greater consumerism. In pre-Christian Rome a husband could order or permit his wife to have an abortion in one pregnancy, and forbid her to in another. We have seen the vacillations of official Church policy. In the Soviet Union, the first modern country to legalize abortion (in 1920), virtual abortion factories were provided at first by the state. These were abolished and abortion declared illegal when it became clear that a confrontation was building with Nazi Germany After World War II, with a new emphasis on consumerism, abortion was again legalized to encourage wives to stay in the labor force and earn a second family income. Throughout, by continuing a half-hearted and ineffective program of birth-control information, the Soviet Union has in effect forced abortion on many women who would have preferred not to conceive at all.

Commercial Sex Attractant Pheromones

The Social Implications

by Nicholas Albery

PHEROMONAL SEX-ATTRACTANT cosmetics have become big business. In the United States, the Beecham Group (through a subsidiary company, Jovan) first marketed the pheromone androstenol in June 1981 as a product called Andron, a "bisexual" cologne for men and women. In December 1981 Britain's Consumer Safety Unit started an investigation of the widely advertised androstenone cosmetic Aeolus 7.

All such products are based on synthetic pheromones. Pheromones are the chemical inner perfumes that our bodies emit (through sweat, urine, and anal and genital secretions) as a means of non-verbal communication. A variety of pheromones signal our fear, aggression, or sexual attraction.

Androstenol or androstenone when sprayed at female pigs in heat immobilises them and induces them to adopt the mating position. Male pigs sprayed with the stuff turn very nasty and aggressive.

There have been a couple of provisional scientific experiments suggesting that these products may act as sex-attractants in humans, affecting judgment, and enhancing masculinity or femininity. Several seating experiments, for instance, have shown that more women than men were attracted to seats sprayed with androstenone.

I have spent many weeks experimenting with pheromones, reading the scientific research papers and talking to scientists, trying to work out what might be the effects on society of the widespread use of these chemicals.

There is no firm evidence that they can cause harm, and it might be thought to be unlikely, given their presence naturally (although in minute quantities) in human secretions. But extrapolating from the effects of pheromones on animals, one might predict increased aggression among human males and disturbed menstrual cycles in females (five of the women staff who worked at the Royal Shakespeare Company theatre in Britain during pheromonal seating experiments had their periods disrupted).

More farfetched speculations as to harmful effects include the possibility of miscarriages in women exposed to strange male pheromones (resorption of embryos occurs with rats exposed to such chemicals); increased hostility between male children and their fathers (a distaste for the odour of the father can accompany son-father competition); accelerated puberty (as with mice); and increased attractiveness of women for mosquitos (even without pheromones, mosquitos prefer women who are ovulating and thus emitting more pheromones than normal).

The copulin pheromone for women, patented but not yet marketed (modeled on vaginal fatty acids, it has a fishy, rancid-butter smell) might have additional hazards for any woman using it – it drives bulls, he-goats, and monkeys in particular wild with desire.

Assuming that pheromones prove to be effective, as various blends are refined, the possible social implications have been exercising the minds of my fellow-members of the Science Fiction Foundation at the United Kingdom's North East London Polytechnic.

Apart from bestiality becoming more common, we predict that pheromones could lead to inappropriate human mating – everyone has their unique pheromonal signature tune, which these chemicals disturb, and people may get together and have children that their own internal pheromones would have guarded them from producing.

Or, less drastically, it may introduce olfactory dissonance into a happy relationship, upsetting its dominance-submissiveness pattern.

People who have success with the opposite sex using these chemicals may tie all their hopes and self-confidence to the artificial pheromones and may become psychologically addicted.

Pornographic magazines may spray pheromones on their centrefold beauties, just as food manufacturers may try spraying their packaging to attract housewives, which would be a form of subliminal advertising. (My own feeling is that these cosmetics should have a strongly recognisable trace element added so that everyone knows when they are being used.)

Future ultrasocialist governments may nationalise pheromonal sprays, and make them available only to those who have low levels of natural attractiveness, so as to equalise opportunities.

*Nicholas Albery is a British science fiction writer. Illustrator Trina Robbins edited **Mama Dramas** and **Wet Satin** (Women's Sexual Fantasies).*

–Art Kleiner

Which woman is wearing pheromones?

The American Air Force is rumoured to have developed a fear-inducing pheromone, for spraying over enemy troops.

Scientist Tom Clark, writing in **World Medicine** (Dr. Michael O'Donnell, Editor; £25/year, fortnightly, from New Medical Journals Ltd., Clareville House, 26-27 Oxendon Street, London SW1Y 4EL, England), speculates that a football crowd sprayed with deodorant might be calmed down, their pheromones extinguished. Or alternatively, a sports team sprayed with androstenone might play more aggressively.

Professor Derek Bryce-Smith of Reading University, U.K., forecasts the collapse of the deodorant industry. We should perhaps wash less if we want to attract the opposite sex. As Napoleon wrote to Josephine whilst away on campaign: "Home in three days. Don't wash."

Even if pheromones don't lead to the introduction of "feelies" in cinemas, they will affect the design of ventilation systems in public buildings. Air from the stage should always be wafted toward the audience to allow them to detect the performers' smells. Tom Clark writes: "London's new National Theatre, like its Royal Festival Hall, has all round ducted air conditioning. Actors there are said to feel a sense of isolation from the audience – a sense they never felt at the Old Vic."

Then too, as we begin to reassert our need to smell people during social intercourse, there could be a retreat from the high-tech enthusiasm for the "global village," the electronic Utopia where we communicate and do business at a distance, through machines.

Again on the positive side, if pheromones become more important for determining social attraction, we might lose our society's obsession with stereotypes of physical attractiveness. This might please the feminists.

But on the other hand, will feminists like the prospect of losing their drive and becoming like immobilised sows when exposed to massed pheromones?

It seems to me amazing that these chemicals were discovered in humans over 30 years ago, and their pheromonal effects have been known (at least in pigs) for a dozen years or more, and yet so few scientific experiments have been published. I am interested, for instance, to know why only one-third of women tested secrete copulin vaginally. Are the two-thirds who don't less successful in finding mates? "Why the devil doesn't somebody find out?" comments Dr. Ben Brooksbank of the Medical Research Council, London, who first discovered androstenol in human urine back in 1950. As he says, "It's certainly the beginning of a very interesting scientific and sociological story. A great deal of research should be done that hasn't been done."

Dr. Brooksbank also suggests it would be worth finding out if people breathing androstenol overnight on their pillows tend to have sexier dreams if female and more aggressive dreams if male, and proposes this as an experiment which the ordinary user could try, without special apparatus. Please let me know c/o CQ if you get any interesting results from this or other experiments.

CQ readers put off by the price of pheromonal cosmetics could try imitating those male Mediterranean folk dancers who keep a handkerchief in their sweating armpits and then wave it around to stimulate the females; or those European women who put a dab or two of their own vaginal juices behind their ears, thus potentially emitting the copulin pheromone. Both these methods are quite possibly as effective as, and certainly cheaper and more honest and personal than, using the marketed brands. ■

FEMINISM AND PORNOGRAPHY

by Stephanie Mills

EVER SINCE we published Michael Phillips' letter, "Violence in Pornography, or not?" (Spring 1981 **CQ**), I have been stewing about the subject. It cleaves my mind. Pornography turns me on; I find it fascinating and so have men I've loved. I should specify that *reading* pornography turns me on. Looking at it is not something I'll go out of my way to do – it leaves too little to the imagination. Yet the worst of it, particularly written porn, is violent; evidence is accumulating that exposure to violent porn (which includes all lie back and enjoy it rape fantasy) promotes a willingness to rape. Feminists say that most porn imagery degrades women. When feminists talk, I listen; the revolutionary insights of feminism have brought me up short more than once and for the better. But the internal contradiction bothers me. It disturbs me to think that I might have a politically incorrect and possibly self-destructive sexual response, that my physical resonance with passivity and captivity is a negative something like a tumor inside me.

I read a little on the subject – Susan Griffin's **Pornography and Silence: Culture's Revenge Against Nature**,[1] Andrea Dworkin's **Pornography: Men Possessing Women**,[2] and Laura Lederer's anthology **Take Back the Night: Women on Pornography**.[3] Griffin's and Dworkin's writings seemed to become what they beheld. Reading their dissections of classic pornography aroused and angered me. Both authors would make great pornographers; they recapitulate common porn with exquisite effect. I was shocked to realize that my absorption in the paradoxical fantasy of pleasurable rape had overridden my identification with the pain of the women being violated. The arousal was a betrayal of self. That awareness must have been the authors' intent.

The books plunged me back into that nightmare where all men are rapists and heterosexual love is deception or impossibility. In the world according to Griffin and Dworkin, the male psyche is hopelessly incomplete and contaminated by the need to objectify, dominate, and hurt women. It is a hostile world and a sexist view.

Dworkin writes: "If a woman has any sense of her own intrinsic worth, seeing pornography in small bits and pieces can bring her to a useful rage. Studying pornography in quantity and depth . . . will turn that same woman into a mourner." Antipornography, it seems, has psychic consequences as serious as pornography itself. But they are in the long run positive and consciousness raising; the purpose is to defuse the internal time bomb of self-negation that rape eros sets ticking.

Pat Califia's libertarian manifesto for freedom of sexual expression at first seemed to state better than I could my own doubts about the antiporn campaign. The article isn't about pornography per se, but sadomasochism, the genre of porn which is most deplored. She suggests an art form, one which any lovers should feel free to choose without condemnation.

I think we are bound (if you'll pardon the pun) to accept without question the sexual choices of consenting adults. I think it desirable to embrace and revel in one's own sexuality, passive, active, or negligible. I think it's vital to write and publish on the subject: clouds of Puritanism are threatening to suffocate the discussion entirely.

Enacted fantasies are harmless if they're truly consensual. But antipornography has convinced me that many women find themselves victimized in rape fantasies they never consented to. I do not buy the idea that there is no violent pornography or that violent pornography is harmless: it is propaganda for rape. It shouldn't (and probably couldn't) be censored, but we might as well condemn it for what it is even as our genitals make hypocrites of us. There's the standard call for erotica which depicts love between equals, but the more important task is to do something – god only knows what – to heal the angry breach between men and women which whets the appetite for violent porn. ■

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1. 1981; $14.35 postpaid from Harper and Row, Mail Order Department, 10 East 53rd Street, New York, NY 10022.
2. 1979; $5.95 postpaid from G.P. Putnam's Sons, 1050 Wall Street W., Lyndhurst, NJ 07071.
3. 1980; $8.95 postpaid from William Morrow and Company, Wilmor Warehouse, 6 Henderson Drive, West Caldwell, NJ 07006.

FEMINISM AND SADOMASOCHISM

by Pat Califia

PHOTOS BY HONEY LEE COTTRELL

Pat Califia, feminist and sadomasochist

THREE YEARS AGO, I decided to stop ignoring my sexual fantasies. Since the age of two, I had been constructing a private world of dominance, submission, punishment, and pain. Abstinence, consciousness-raising, and therapy had not blighted the charm of these frightful reveries. I could not tolerate any more guilt, anxiety, or frustration, so I cautiously began to experiment with real sadomasochism. I did not lose my soul in the process. But in those three years, I lost a lover, several friends, a publisher, my apartment, and my good name because of the hostility and fear evoked by my openness about my true sexuality.

Writing this article is painful because it brings back the outrage and hurt I felt at being ostracized from the lesbian feminist community. I've been a feminist since I was 13 and a lesbian since I was 17. I didn't lose just a ghetto or a subculture – lesbian feminism was the matrix I used to become an adult. Fortunately for my sanity and happiness, I managed to construct a new social network. My friends and lovers are bisexual women (some of

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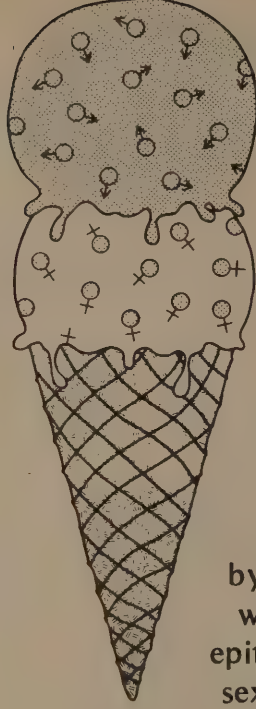
This article first appeared in ***Heresies****, a magazine produced for a feminist audience (reviewed on p. 41 of this issue). It deals with the objections some feminists have to S/M. However, the biggest problems in a sadomasochist's life are not caused by the bigotry of some members of the women's movement. We are far more concerned about the vicious harassment, imprisonment, and violence we face from the state and its agents – especially the vice squads of local police departments. The bulk of prejudice against sadomasochism does not come from feminism. It comes from organized religion, psychiatry, and others who promulgate Judeo-Christian morality. This article is an attempt to reach an audience that is potentially more educable than the people and institutions who are genuinely responsible for sexual repression. Despite the shortcomings of some segments of the women's movement, I remain a firm supporter of the basic goals of feminism.*

Women interested in exploring S/M with other women can contact Samois at P.O. Box 11798, San Francisco, CA 94101. Samois has published a book about lesbian S/M entitled ***Coming to Power****, available for $7.95.* *–Pat Califia*

Pat Califia is a working-class kid from a Mormon background. Her father was a construction worker and the family moved around a lot. She moved to San Francisco from Salt Lake City eight years ago. She lives with a woman lover in an open relationship. She makes quilts, reads science fiction, and has a cat. She believes that "You don't have to be antipornography to be feminist" and has been a feminist for ten years. In addition to that, she has done work on antiwar issues and low income housing. "I do more than just sex," she says. "I'm a rad."

Pat is the news editor of ***The Advocate*** *(****NWEC*** *p. 341), the largest gay newsmagazine in the U.S., and a freelance writer. She is the author of a lesbian sex education book called* ***Sapphistry*** *(1980; $6.95 postpaid from Naiad Press, Box 10543, Tallahassee, FL 38302). Her writing has appeared in* ***Gay Community News****, the* ***Journal of Homosexuality****,* ***Sinister Wisdom****, and* ***Black Maria*** *as well as in* ***Heresies****. She is presently at work on a book of erotic short stories dealing eclectically with lesbian, gay, and straight S/M.* *–Stephanie Mills*



Sadomasochism is usually dealt with in an abstract, self-righteous way by feminist theorists who believe it is the epitome of misogyny, sexism, and violence.

whom do S/M professionally), gay and bisexual men, and other outlaw lesbians. If I were isolated, I would not be strong enough to speak out about something that makes me this vulnerable.

I describe my feelings about this issue because sadomasochism is usually dealt with in an abstract, self-righteous way by feminist theorists who believe it is the epitome of misogyny, sexism, and violence. In this article I shall examine sadomasochism in a theoretical way, and attempt a rapprochement between feminism and S/M. But I am motivated by my concern for the people who are frightened or ashamed of their erotic response to sadomasochistic fantasies. I don't want to hear any more tragic stories from women who have repressed their own sexuality because they think that's the only politically acceptable way to deal with a yearning for helplessness or sexual control. I don't believe that any more than I believe homosexuals should be celibate so they can continue to be good Catholics. The women's movement has become a moralistic force, and it can contribute to the self-loathing and misery experienced by sexual minorities. Because sexual dissenters are already being trampled on by monolithic, prudish institutions, I think it is time the women's movement started taking more radical positions on sexual issues.

It is difficult to discuss sadomasochism in feminist terms because some of the slang S/M people use to talk about our sexuality has been appropriated by feminist propagandists. Terms like "roles," "masochism," "bondage," "dominance," and "submission" have become buzzwords. Their meanings in a feminist context differ sharply from their significance to S/M people. The discussion is rendered even more difficult because feminist theorists do not do their homework on human sexuality before pronouncing judgment on a sexual variation. Like Victorian missionaries in Polynesia, they insist on interpreting the sexual behavior of other people according to their own value systems. A perfect example of this is the "debate" over transsexuality. In its present form, feminism is not necessarily the best theoretical framework for understanding sexual deviation, just as unmodified Marxism is an inadequate system for analyzing the oppression of women.

Since the label "feminist" has become debased coinage, let me explain why I call myself a feminist. I believe that the society I live in is a patriarchy, with power concentrated in the hands of men, and that this patriarchy actively prevents women from becoming complete and independent human beings. Women are oppressed by being denied access to economic resources, political power, and control over their own reproduction. This oppression is managed by several institutions, chiefly the family, religion, and the state. An essential part of the oppression of women is control over sexual ideology, mythology, and behavior. This social control affects the sexual nonconformist as well as the conformist. Because our training in conventional sexuality begins the minute we are born and because the penalties for rebellion are so high, no individual or group is completely free from erotic tyranny.

I am not a separatist. I believe that men can be committed to the destruction of the patriarchy. After all, the rewards of male dominance are given only to men who perpetuate and cooperate with the system. I am not "woman-identified" – i.e., I do not believe that women have more insight, intuition, virtue, identification with the earth, or love in their genes than men. Consequently, I cannot support everything women do, and I believe the women's movement could learn a lot from politicized or deviant men. On the other hand, I do not find it easy to work with men, partly because male feminist theory is pitifully underdeveloped. I do not think separatism is worthless or bankrupt. It can be useful as an organizing strategy and teaches women valuable survival skills. The taste of autonomy that separatism provides is intoxicating, and can be a powerful incentive to struggle for real freedom.

I think it is imperative that feminists dismantle the institutions that foster the exploitation and abuse of women. The family, conventional sexuality, and gender are at the top of my hit list. These institutions control the emotional, intimate lives of every one of us, and they have done incalculable damage to women. I cannot imagine how such drastic change can be accomplished without armed struggle, the appropriation and reallocation of wealth, and a change in the ownership of the means of production. When women are liberated, women will probably cease to exist, since our whole structure of sex and gender must undergo a complete transformation.

The term *sadomasochism* has also been debased, primarily by the mass media, clinical psychology, and the antipornography movement. After all, homophobia is not the only form of sexual prejudice. Every minority sexual behavior has been mythologized and distorted. There is a paucity of accurate, explicit, nonjudgmental information about sex in modern America. This is one way sexual behavior is controlled. If people don't know a particular technique or lifestyle exists, they aren't likely to try it. If the only images they have of a certain sexual act are ugly, disgusting, or threatening, they will either not engage in that act or be furtive about enjoying it.

Since there is so much confusion about what S/M is, I want to describe my own sexual specialties and the sadomasochistic subculture. I am basically a sadist. About 10% of the time, I take the other role (bottom, slave, masochist). This makes me atypical, since the majority of women and men involved in S/M prefer to play bottom. I enjoy leathersex, bondage, various forms of erotic torture, flagellation (whipping), verbal humiliation, fistfucking, and watersports (playing with enemas and piss). I do not enjoy oral sex unless I am receiving it as a form of sexual service, which means my partner must be on her knees, on her back, or at least in a collar. I have non-S/M sex rarely, mostly for old times' sake, with vanilla friends* I want to stay close to. My primary relationship is with a woman who enjoys being my slave. We enjoy tricking with other people and telling each other the best parts afterward.

Because sadomasochism is usually portrayed as a violent, dangerous activity, most people do not think there is a great deal of difference between a rapist and a bondage enthusiast. Sadomasochism is not a form of sexual assault. It is a consensual activity that involves polarized roles and intense sensations. An S/M scene is always preceded by a negotiation in which the top and bottom decide whether or not they will play, what activities are likely to occur, what activities will not occur, and about how long the scene will last. The bottom is usually given a "safe word" or "code action" she can use to stop the scene. This safe word allows the bottom to enjoy a fantasy that the scene is not consensual, and to protest verbally or resist physically without halting stimulation.

The key word to understanding S/M is *fantasy*. The roles, dialogue, fetish costumes, and sexual activity are part of a drama or ritual. The participants are enhancing their sexual pleasure, not damaging or imprisoning one another. A sadomasochist is well aware that a role adopted during a scene is not appropriate during other interactions and that a fantasy role is not the sum total of her being.

S/M relationships are usually egalitarian. Very few bottoms want a full-time mistress. In fact, the stubbornness and aggressiveness of the masochist is a byword in the S/M community. Tops often make nervous jokes about being slaves to the whims of their bottoms. After all, the top's pleasure is dependent on the bottom's willingness to play. This gives most sadists a mild-to-severe case of performance anxiety.

The S/M subculture is a theater in which sexual dramas can be acted out and appreciated. It also

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**Vanilla* is to *S/M* what *straight* is to *gay*. I don't use the term as a pejorative but because I believe sexual preferences are more like flavor preferences than like moral/political alliances.

Photographs by Honey Lee Cottrell

serves as a vehicle for passing on new fantasies, new equipment, warnings about police harassment, introductions to potential sex partners and friends, and safety information. Safety is a major concern of sadomasochists. A major part of the sadist's turn-on consists of deliberately altering the emotional or physical state of the bottom. Even a minor accident like a rope burn can upset the top enough to mar the scene. And, of course, a bottom can't relax and enjoy the sex if she doesn't completely trust her top. The S/M community makes some attempt to regulate itself by warning newcomers away from individuals who are inconsiderate, insensitive, prone to playing when they are intoxicated, or unsafe for other reasons. The suppression of S/M isolates novice sadists and masochists from this body of information, which can make playing more rewarding and minimize danger.

For some people, the fact that S/M is consensual makes it acceptable. They may not understand why people enjoy it, but they begin to see that S/M people are not inhumane monsters. For other people, including many feminists, the fact that it is consensual makes it even more appalling. A woman who deliberately seeks out a sexual situation in which she can be helpless is a traitor in their eyes. Hasn't the women's movement been trying to persuade people for years that women are not naturally masochistic?

Originally, this slogan meant that women do not create their own second-class status, do not enjoy it, and are the victims of socially constructed discrimination, not biology. A sexual masochist probably doesn't want to be raped, battered, discriminated against on her job, or kept down by the system. Her desire to act out a specific sexual fantasy is very different from the pseudopsychiatric dictum that a woman's world is bound by housework, intercourse, and childbirth.

Some feminists object to the description of S/M as consensual. They believe that our society has conditioned all of us to accept inequities in power and hierarchical relationships. Therefore, S/M is simply a manifestation of the same system that dresses girls in pink and boys in blue, allows surplus value to accumulate in the coffers of capitalists and gives workers a minimum wage, and sends cops out to keep the disfranchised down.

It is true, as I stated before, that society shapes sexuality. We can make any decision about our sexual behavior we like, but our imagination and ability to carry out those decisions are limited by the surrounding culture. But I do not believe that sadomasochism is the result of institutionalized injustice to a greater extent than heterosexual marriage, lesbian bars, or gay male bathhouses. The system is unjust because it assigns privileges based on race, gender, and social class. During an S/M encounter, the participants select a particular role because it best expresses their sexual needs, how they feel about a particular partner, or which outfit is clean and ready to wear. The most significant reward for being a top or a bottom is sexual pleasure. If you don't like being a top or a bottom, you switch your keys. Try doing that with your biological sex or your race or your socioeconomic status. The S/M subculture is affected by sexism, racism, and other fallout from the system, but the dynamic between a top and a bottom is quite different from the dynamic between men and women, whites and Blacks, or upper- and working-class people. The roles are acquired and used in very different ways.

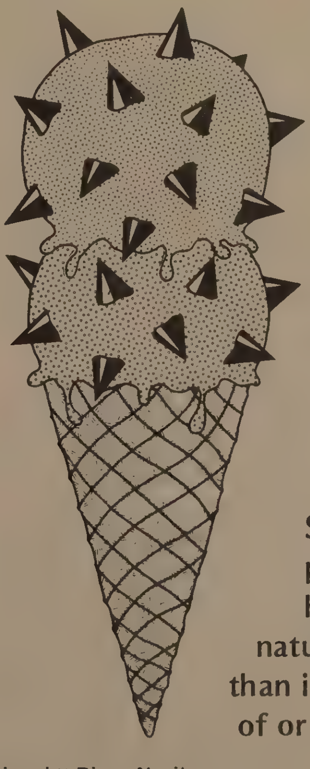
Some feminists still find S/M roles disturbing, because they believe they are derived from genuinely oppressive situations. They accuse sadomasochism of being fascistic because of the symbolism employed to create an S/M ambiance. And some S/M people do enjoy fantasies that are more elaborate than a simple structure of top versus bottom. An S/M scene can be played out using the personae of guard and prisoner, cop and suspect, Nazi and Jew, white and Black, straight man and queer, parent and child, priest and penitent, teacher and student, whore and client, etc.

However, no symbol has a single meaning. Its meaning is derived from the context in which it is used. Not everyone who wears a swastika is a Nazi, not everyone who has a pair of handcuffs on his belt is a cop, and not everyone who wears a nun's habit is a Catholic. S/M is more a parody of the hidden sexual nature of fascism than it is a worship of or acquiescence to it. How many real Nazis, cops, priests, or teachers would be involved in a kinky sexual scene? It is also a mistake to assume that the historical oppressor is always the top in an S/M encounter. The child may be chastising the parent, the prisoner may have turned the tables on the cop, and the queer may be forcing the straight man to confront his sexual response to other men. The dialogue in some S/M scenes may sound sexist or homophobic from the outside, but its real meaning is probably neither. A top can call his bottom a cocksucker to give him an instruction (i.e., indicate that the top wants oral stimulation), encourage him to lose his inhibitions and perform an act he may be afraid of, or simply acknowledge shame and guilt and use it to enhance the sex act rather than prevent it.

S/M eroticism focuses on whatever feelings or actions are forbidden, and searches for a way to obtain pleasure from the forbidden. It is the quintessence of nonreproductive sex. Those feminists who accuse sadomasochists of mocking the oppressed by playing with dominance and submission forget that *we* are oppressed. We suffer police harassment, violence in the street, discrimination in housing and in employment. We are not treated the way our system treats its collaborators and supporters.

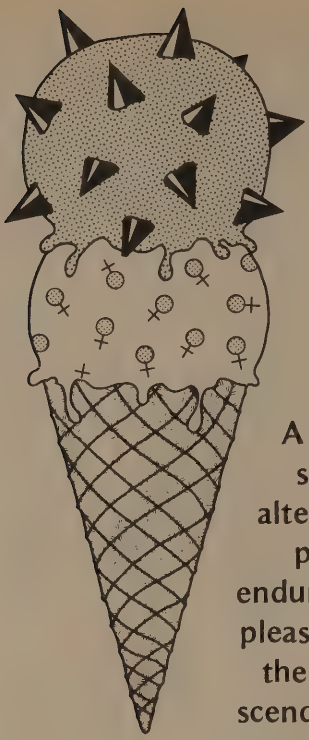
The issue of pain is probably as difficult for feminists to understand as polarized roles. We tend to associate pain with illness or self-destruction. First of all, S/M does not necessarily involve pain. The exchange of power is more essential to S/M than intense sensation, punishment, or discipline. Second, pain is a subjective experience. Depending on the context, a certain sensation may frighten you, make you angry, urge you on, or get you hot. People choose to endure pain or discomfort if the goal they are striving for makes it worthwhile. Long-distance runners are not generally thought of as sex perverts, nor is Mother Theresa. The fact that masochism is disapproved of when stressful athletic activity and religious martyrdom are not is an interesting example of the way sex is made a special case in our society. We seem to be incapable of using the same reason and compassion we apply to non-sexual issues to formulate our positions on sexual issues.

S/M violates a taboo that preserves the mysticism of romantic sex. Any pain involved is deliberate. Aroused human beings do not see, smell, hear, taste, or perceive pain as acutely as the nonaroused individual. Lots of people find bruises or scratches the morning after an exhilarating session of lovemaking and can't remember exactly how or when they got them. The sensations involved in S/M are not that different. But we're supposed to fall into bed and do it with our eyes closed. Good,



Drawings by Diana Nugit

S/M is more a parody of the hidden sexual nature of fascism than it is a worship of or acquiescence to it.



A good top builds sensation slowly, alternates pain with pleasure, rewards endurance with more pleasure, and teaches the bottom to transcend her own limits.

enthusiastic sex is supposed to happen automatically between people who love each other. If the sex is less than stunning, we tend to blame the quality of our partner's feelings for us. Planning a sexual encounter and using toys or equipment to produce specific feelings seems antithetical to romance.

What looks painful to an observer is probably being perceived as pleasure, heat, pressure, or a mixture of all these by the masochist. A good top builds sensation slowly, alternates pain with pleasure, rewards endurance with more pleasure, and teaches the bottom to transcend her own limits. With enough preparation, care, and encouragement, people are capable of doing wonderful things. There is a special pride which results from doing something unique and extraordinary for your lover. The sadomasochist has a passion for making use of the entire body, every nerve fiber, and every wayward thought.

Recently, I have heard feminists use the term "fetishistic" as an epithet and a synonym for "objectifying." Sadomasochists are often accused of substituting things for people, of loving the leather or rubber or spike heels more than the person who is wearing them. Objectification originally referred to the use of images of stereotypically feminine women to sell products like automobiles and cigarettes. It also referred to the sexual harassment of women and the notion that we should be available to provide men with sexual gratification without receiving pleasure in return and without the right to refuse to engage in sex. A concept which was originally used to attack the marketing campaigns of international corporations and the sexual repression of women is now being used to attack a sexual minority.

Fetish costumes are worn privately or at S/M gatherings. They are as unacceptable to employers and advertising executives as a woman wearing overalls and smoking a cigar. Rather than being part of the sexual repression of women, fetish costumes can provide the women who wear them with sexual pleasure and power. Even when a fetish costume exaggerates the masculine or feminine attributes of the wearer, it cannot properly be called sexist. Our society strives to make masculinity in men and femininity in women appear natural and biologically determined. Fetish costumes violate this rule by being too theatrical and deliberate. Since fetish costumes may also be used to transform the gender of the wearer, they are a further violation of sexist standards for sex-specific dress and conduct.

The world is not divided into people who have sexual fetishes and people who don't. There is a continuum of response to certain objects, substances, and parts of the body. Very few people are able to enjoy sex with anyone, regardless of their appearance. Much fetishism probably passes as "normal" sexuality because the required cues are so common and easy to obtain that no one notices how necessary they are.

Human sexuality is a complicated phenomenon. A cursory examination will not yield the entire significance of a sexual act. Fetishes have several qualities which make them erotically stimulating and unacceptable to the majority culture. Wearing leather, rubber, or a silk kimono distributes feeling over the entire skin. The isolated object may become a source of arousal. This challenges the identification of sex with the genitals. Fetishes draw all the senses into the sexual experience, especially the sense of smell and touch. Since they are often anachronistic or draw attention to erogenous zones, fetish costumes cannot be worn on the street. Fetishes are reserved for sexual use only, yet they are drawn from realms not traditionally associated with sexuality. Fetishism is the product of imagination and technology.

Sadomasochism is also accused of being a hostile or angry kind of sex, as opposed to the gentle and loving kind of sex that feminists should strive for. The women's movement has become increasingly pro-romantic love in the last decade. Lesbians are especially prone to this sentimental trend. Rather than being critical of the idea that one can find enough fulfillment in a relationship to justify one's existence, feminists are seeking membership in a perfect, egalitarian couple. I question the value of this.

There is no concrete evidence that the childhoods of sadomasochists contained any more corporal punishment, puritanism, or abuse than the childhoods of other people. There is also no evidence that we secretly fear and hate our partners. S/M relationships vary from no relationship at all (the S/M is experienced during fantasy or masturbation) to casual sex with many partners to monogamous couples, and include all shades in between. There are many different ways to express affection or sexual interest. Vanilla people send flowers, poetry, or candy, or they exchange rings. S/M people do all that, and may also lick boots, wear a locked collar, or build their loved one a rack in the basement. There is little objective difference between a feminist who is offended by the fact that my lover kneels to me in public and suburbanites calling the cops because the gay boys next door are sunbathing in the nude. My sexual semiotics differ from the mainstream. So what? I didn't join the feminist movement to live inside a Hallmark greeting card.

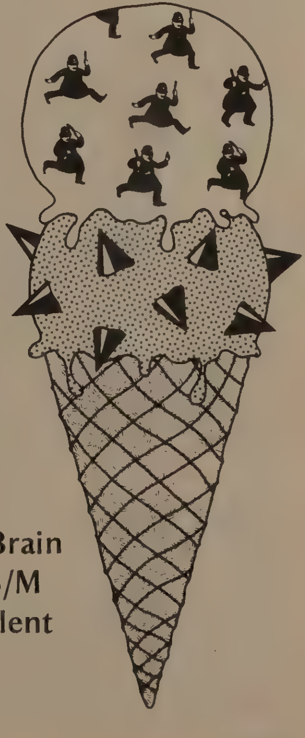
Wearing leather, rubber, or a silk kimono distributes feeling over the entire skin. This challenges the identification of sex with the genitals.

Is there a single controversial sexual issue that the women's movement has not reacted to with a conservative, feminine horror of the outrageous and the rebellious? A movement that started out saying biology is *not* destiny is trashing transsexuals and celebrating women's "natural" connection to the earth and living things. A movement that spawned children's liberation is trashing boy-lovers and supporting the passage of draconian sex laws that assign heavier sentences for having sex with a minor than you'd get for armed robbery. A movement that developed an analysis of housework as unpaid labor and acknowledged that women usually trade sex for what they want because that's all they've got is joining the vice squad to get prostitutes off the street. A movement whose early literature was often called obscene and banned from circulation is campaigning to get rid of pornography. The only sex perverts this movement stands behind are lesbian mothers, and I suspect that's because of the current propaganda about women being the nurturing, healing force that will save the world from destructive male energy.

Lesbianism is being desexualized as fast as movement dykes can apply the whitewash. We are no longer demanding that feminist organizations acknowledge their lesbian membership. We are pretending that the words *feminist* and *woman* are synonyms for *lesbian.*

The antipornography movement is the best of the worst of the women's movement, and it must take responsibility for much of the bigotry circulating in the feminist community. This movement has consistently refused to take strong public positions supporting sex education, consenting-adult legislation, the right to privacy, the decriminalization of prostitution, children's and adolescents' rights to sexual information and freedom, and the First Amendment. It has encouraged violence against sexual minorities, especially sadomasochists, by slandering sexual deviation as violence against women. Their view of S/M is derived from one genre of commercial pornography (male-dominant and female-submissive) and makes Krafft-Ebing look like a liberal.

Commercial pornography distorts all forms of

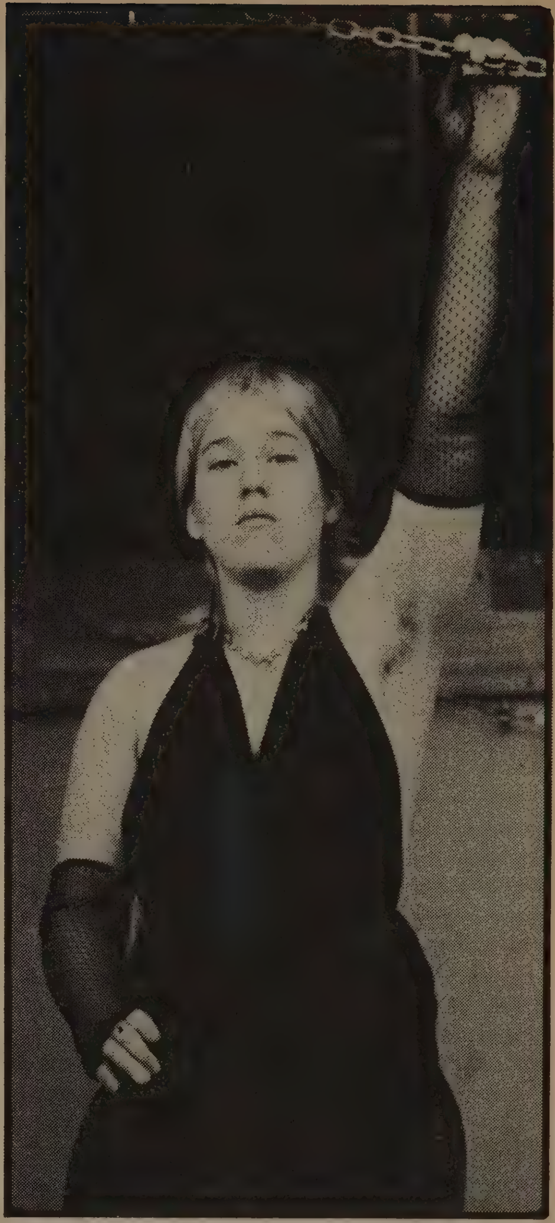


It is not a felony to fantasize committing an illegal act, and it should not be, unless we want our morals regulated by the Brain Police. Banning S/M porn is the equivalent of making fantasy a criminal act.

sexual behavior. There are several reasons for this. One is that it is designed to make money, not to educate people to be aesthetically pleasing. The other is that it is quasi-legal, and thus must be produced as quickly and surreptitiously as possible. Another reason is that erotic material is intended to gratify fantasy, not serve as a model for actual behavior.

S/M pornography can be divided into several types, each designed for a different segment of the S/M subculture. Most of it represents women dominating and disciplining men, since the largest market for S/M porn is heterosexual submissive males. Very little S/M porn shows any actual physical damage or even implies that damage is occurring. Most of it depicts bondage, or tops dressed in fetish costumes and assuming threatening poses.

Very little S/M porn is well produced or informative. But eliminating it will have the effect of further impoverishing S/M culture and isolating sadomasochists from one another, since many of us make contact via personal ads carried in pornographic magazines. The excuse for banning "violent" porn is that this will end violence against women. The causal connection is dubious. It is indisputably true that very few people who consume pornography ever assault or rape another person. When a rape or assault is committed, it usually occurs after some forethought and planning. But legally, a free society must distinguish between the fantasy or thought of committing a crime and the actual crime. It is not a felony to fantasize committing an illegal act, and it should not be, unless we want our morals regulated by the Brain Police. Banning S/M porn is the equivalent of making fantasy a criminal act. Violence against women will not be reduced by increasing sexual repression. People desperately need better information about sex; more humanistic and attractive erotica; more readily available birth control, abortion, and sex therapy; and more models for nontraditional, nonexploitative relationships.



I AM OFTEN ASKED if sadomasochism will survive the revolution. I think all the labels and categories we currently use to describe ourselves will change dramatically in the next 100 years, even if the revolution does not occur. My fantasy is that kinkiness and sexual variation will multiply, not disappear, if terrible penalties are no longer meted out for being sexually adventurous.

There is an assumption behind the question that bothers me. The assumption that sadomasochists are part of the system rather than part of the rebellion has already been dealt with in this article. But there is another assumption — that we must enjoy being oppressed and mistreated. We like to wear uniforms? Then we must get off on having cops bust up our bars. We like to play with whips and nipple clamps and hot wax? Then it must turn us on when gangs of kids hunt us down, harass and beat us. We're not really human. We're just a bunch of leather jackets and spike heels, a bunch of post office boxes at the bottom of sex ads.

We make you uncomfortable, partly because we're different, partly because we're sexual, and partly because we're not so different. I'd like to know when you're going to quit blaming us, the victims of sexual repression, for the oppression of women. I'd like to know when you're going to quit objectifying us. ■

The day they loved the Rec Room

Even more controversial than "The Day They Tested the Rec Room," a story about zero-gravity lovemaking in space we ran in the Summer '81 **CQ**, *was a complaint letter about it we printed in the Fall '81 issue. William Shurcliff commented: "I am dumbfounded by the purposeless vulgarity. . . . Common pornography. . . . Do you expect me to hide the magazine from my children? . . . Smutty jokes. . . . Puerile filth. . . . Cancel my subscription. . . . I am bitterly disappointed. . . ."*

In response to his note, which was one of dozens condemning the article, we got scores of letters, mostly from women, defending the piece and urging **CQ** *not to become fainthearted about publishing such material. The pro and con of it all convinced me that we are heading into a decade of increasing public squareness and timidity, and* **CoEvolution***'s response should be to become, if anything, bolder in its publishing. In gratitude then to you letter-writers for showing us the way, here's a tiny sample of the support mail, all very gender-relevant to other items in this* **CQ**. *—Stewart Brand*

Dear people —

I was dismayed to see that "The Day They Tested the Rec Room" was the most complained-about story you've run. I thought it was delightful and probably the best (fiction) story I've seen in **CQ**. And of course Betty Dodson's illustrations are always great. But there are some real issues that were raised by the story and by the reaction to it. As a woman who works as an Able Seaman, I very much enjoyed the turning of tables on the sort of myths I have to deal with every day. Just this week a man came by the Women's Maritime Association exhibit at Fish Expo, which I was tending, to tell me that I was not strong enough to lift heavy shackles on tugboats. When I told him I'd been doing it for four-and-a-half years he walked away saying, "Oh no, honey, you're not strong enough."

But other important issues are around sexuality and how its expression is damaged by our culture. This culture is extremely sex-negative — the shocker is that these attitudes are expressed so strongly by readers of a supposedly liberal magazine. A Sexual Freedom Amendment is sorely needed. Homophobia is another issue. Are your readers afraid to read or think about sexuality between members of the same sex? Or to see pictures of that? Then I'd suggest they look at where these attitudes come from and whether they are proud of them. As to children seeing these materials, that would depend largely on the attitudes of those around them. If children are told that sex is dirty, they will believe it until they are old enough to learn otherwise. I would be proud to raise children who feel good about their bodies and their sexuality and do not try to restrict the consenting sexual behavior of others.

Molly Hogan
Bainbridge Island, Washington

Dear Mr. Brand,

I am writing to say how much I enjoyed "The Day They Tested the Rec Room." I found it to be a very witty and pertinent piece of fiction. It by no means fit my definition of pornography: no one was exploited, and the story did not display any violence (physical or psychological).

Sincerely yours,
Cynthia Angelica Milner
Ann Arbor, Michigan

Heresies

The atmosphere in the feminist bookstore where I went to pick up some back issues of **Heresies** *was as refreshing as summer camp. There were all these clean, clear-eyed women wearing cropped hair, comfortable clothes, low-heeled shoes, and open, intelligent expressions. The place was a wellspring of nurture and excitement.*

Heresies *is that in a magazine. Produced by a collective, each issue is a special: Feminism and Ecology, Third World Women, Women Working Together, and Sexuality have been among their subjects. Some of the material is a grind — theoretical, rhetorical stuff on feminism as a subject. Some of it is revelatory, especially that dealing with feminism as a practice or perspective. Pat Califia's article, reprinted on p. 33 of this issue, is an example. Everything they publish has consequence, and the art they include is striking — images that hit home.*

Heresies *— and feminist publishing generally — tenders up a whole world of cultural riches. It offers the thrill of more to know.* *—Stephanie Mills*

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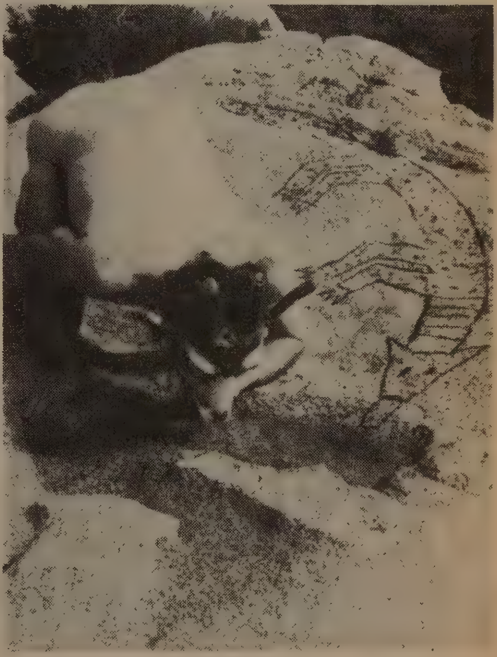


People could change from animals and birds to humans at will. —Barbara Strasen. From Desert Notes. 1979. (A series of images and statements about the tension between scientific research into how people and animals respond to heat, desolation and lack of water; and the psychic realities of desert experience as revealed in the myths and legends of traditional desert dwellers — Australian Aborigines, African Bush people, Navajo and Hopi people.)

■

It is no wonder that the feminist movement rose again in the same decade as the ecological crisis. The implications of feminism extend to issues of the meaning, purpose and survival of life.

> Never to despise in myself what I have been taught
> to despise. Not to despise the other.
> Not to despise the *it*. To make this relation
> with it: to know that I am it.
> (Muriel Rukeyser, "Despisals")

LAND USE

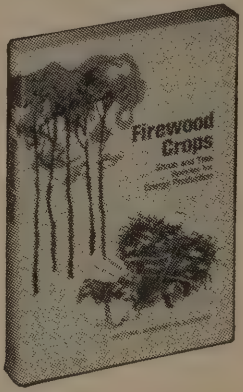
Firewood Crops

Throughout much of the Third World, the problem is not the price of gas, but where to find enough wood to cook with. In Nepal, for example, a trip to gather cooking wood that used to take a couple of hours now takes an entire day. And as the trees go, so goes the soil, and with it agriculture. In **Firewood Crops,** *60 promising species and varieties for firewood each receive a two-page treatment. The photos by themselves are a wonderful tour through the forests of the world. There is also a chapter on efficient wood stoves that attacks the problem from a different angle. And, to show it can be done, two reforestation success stories are included — South Korea and Addis Ababa, Ethiopia.*

—Richard Nilsen

Firewood Crops
(Shrub and Tree Species
for Firewood Production)
Erik Eckholm, et al.
1980; 249 pp.

free only to individuals
from developing countries,
development assistance
agencies, or universities
from:
National Academy of
of Sciences
JH-217
2101 Constitution
Avenue NW
Washington, DC 20418



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Development-assistance agencies have also shown a new awareness of the importance of trees. They realize, for example, that it is pointless to worry about producing more food if there is no fuel to cook it with, and foolish to invest in expensive engineering projects if continual deforestation by firewood gatherers will silt up the dams and irrigation canals and make mountain roads impassable because of soil slippage. "Forestry supports agriculture," said Mao Tse Tung, and agricultural scientists and planners attest to the wisdom of his words. . . .

•

Wood can be a "self-reliant" fuel that requires little foreign exchange and is independent of the vagaries of international commerce. It does not demand a sophisticated distribution network; indeed, it is the most accessible form of energy for most rural populations in developing countries. It is a familiar fuel whose use requires few extension services. One of the cheapest sources of energy available, it can, if necessary, be used without expensive metal appliances. It is one of the few fuels that an individual can produce for himself.

Gathering firewood. Obokeo, Cameroon.

While you're hugging the tree . . .

I loved the bit on North India's tree huggers. (Fall '81 **CQ**).

I hug trees. Not to save them, but for the good, peaceful feeling I get from how long this tree has been standing here, right here, sinking in roots, and being still.

To save trees I go for the "save *a* tree" approach. Before trees on national forest land are felled, they're painted. A few minutes of scraping and they're unpainted.

A logger friend and I were helping each other, sauna house logs for me, firewood for him. As I worked setting chokers in the rain soaked brush, he showed me several old seed trees that he'd scraped the paint off of when they logged that unit.

For now, most of the mills around here are closed, or barely going. Most everybody is out of work and the trees have a reprieve. The wind blows through them, and they sigh. . . .

Charles E. Mabbott
Darby, Montana

Note

Dear CoEv:

After a winter of trimming a 400-acre orchard, I can tell you that most of the world's problems are caused by people who don't prune apple trees.

John Benecki
Langhorne, Pennsylvania

Coltsfoot

In the past five years of reviewing for **CQ**, *I've seen two topics dominate the "natural history" publishing market: birds and wild plant collecting. Our wild foods reject pile is enormous and filled with ignorant, even dangerous books.* **Coltsfoot** *is the reliable "thank the lord" newsletter: updates on recent medical research, great reviews of recent books, lots of herbal anecdotes and how-to-do-it plant projects. Its collecting advice and recipes are also top notch.*

—Peter Warshall

Coltsfoot
Bill Roody, Editor

$6/year (6 issues)
from:
Coltsfoot
P.O. Box 529
Elkins, WV 26241

•

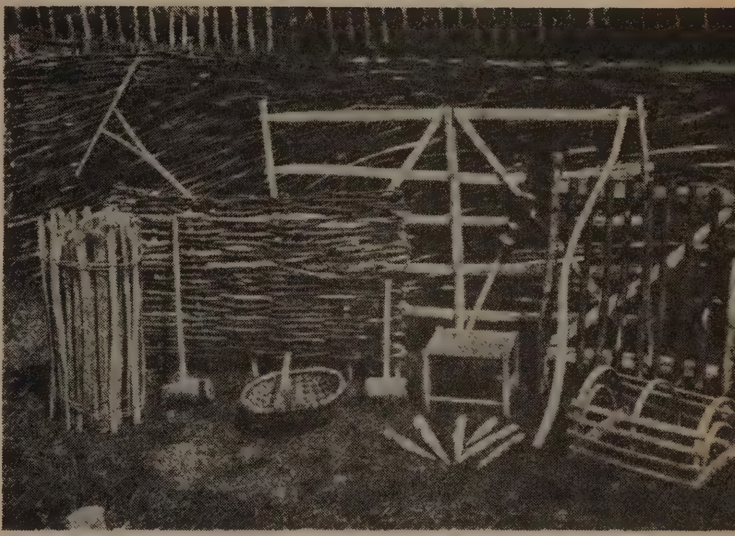
I instruct in Wilderness Survival, and one of the more questionable bits of information we impart is how to test for edibility if lost in an area where plants are unfamiliar. Most "rules" (e.g., "Plants that protect themselves with thorns do not also protect themselves by being poisonous") have exceptions (horse nettle). In addition to the mulberry, there are several exceptions to "Berries white, a poison sight" — white mulberry, the snowberry, and a rare white strawberry. To edible ferns, I would add the new white growth stalk (looks like a tooth) of New York fern as edible, though with restraint, since taking it destroys the plant. . . . As to the effect of pollutants on wild plants, the first indicators are the lichens, whose presence shows freedom from even light to moderate pollution; they are the first to go when the environment begins to deteriorate. Contrarywise, and in support of Darwin's hypothesis of a niche for every plant, *Alianthus* trees thrive where pollution has destroyed the competition.

Tools and Devices for Coppice Crafts

Coppicing (Summer '81 CQ) is an ancient kind of forestry where the tree is cut off close to the ground and sucker shoots are allowed to grow back. These shoots are then harvested repeatedly on a rotation that depends on the diameter needed for firewood, fencing, furniture, or whatever. This well-illustrated pamphlet is a good introduction to the tools and vocabulary needed to work coppice wood into everything from fencing material to hay rakes. —*Richard Nilsen*

[Suggested by Jonathan Evelegh]

Tools and Devices for Coppice Crafts
(Young Farmers' Club Booklet No. 31)
F. Lambert
£1.50 (approx. $4 or 10 International Reply Coupons) postpaid from:
The Centre for Alternative Technology
Machynlleth, Powys
Wales, United Kingdom



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A selection of the things made from coppice material. In the background is a continuous WATTLE FENCE of hazel. In front of this, reading from left to right are:

Roll of SPILE-AND-WIRE fence	sweet chestnut
HAY RAKE	ash, sometimes willow
WATTLE HURDLE	hazel
BITEL or MAUL	head of apple, pear or elm, handle of ash
SPELK BASKET	oak
MALLET	materials as for the maul
GATE HURDLE	ash
TENT PEGS	beech or ash
STOOL	ash, beech or oak, with rush seat.
BESOM	head of silver birch, bonds of willow, ash or oak, handle of ash, hazel or silver birch
SCYTHE SNEAD	ash
HAY CRIB	ash
GATE	sweet chestnut

If the coppice has been used economically there will be 'left-overs' of pea boughs, bean sticks, and faggots for burning.

Maximum oxygen tree question

In the Fall '81 CQ science fiction writer John Brunner asked, "What should one plant that yields, for a given area of ground, the maximum quality of oxygen?" —*Stewart Brand*

Re: a champion Petherton/Zanzibar oxygen tree.

My guess is that Mr. Brunner should plant something like a bermuda grass lawn, or maybe a stand of bamboo. Since he's interested only in oxygen output, he'll want to avoid something like a tree, which must put a lot of effort into standing up above its competitors, and thereby may lose out in the O_2 sweepstakes. (Sometimes it looks almost as if those damn trees were trying to look pretty, instead of pumping out enough gas to inflate some dumb theory or other.)

Or he might trust in evolution and go with whatever catches on, preferably native species for his area, everything from trees on down to a nice green crusted slime on the ground. If he can figure out how to do it without killing the plants or the soil, he should get rid of all the animals and fungi, any decomposers around — a flamethrower might come in handy, although it too will use oxygen.

If he wants to plant trees that will serve the future as oaks, he might try oaks. They've been successful in his area before, dropped leaves and all. If he's still hung up on oxygen, he could try a swamp, though he might have trouble getting one started. Gaia or Gaea being what she is, though, anything he plants is going to end up tying up about as much oxygen as it puts out, no free lunch.

A. Hamilton
Redding, California

Re: "Maximum Oxygen Tree?"

From **An Introduction to Landscape Architecture**, by Michael Laurie (1975; $14.95 postpaid from Elsevier-North Holland Publishing Company, 52 Vanderbilt Avenue, New York, NY 10017): "Most statistics seem to indicate that the oxygen-replenishing characteristics of green vegetation are significant only in terms of vast areas of countryside or jungle, such as the Amazon Basin. According to Erich Kuhn, the effectiveness of urban parks to dispose of the carbon dioxide produced in cities by heating installations, exhausts, and so on is scarcely worth calculating. He cites the opinion of Camillo Sitte that a wooded area of three acres could absorb only as much carbon dioxide as four human beings could produce in the course of breathing, cooking, and heating. Martin Wagner has stated that to improve the air of Berlin to any marked degree, a green area of 3 million acres would be needed (Golden Gate Park in San Francisco is 1000 acres)."

Clark
Lawrence, Kansas

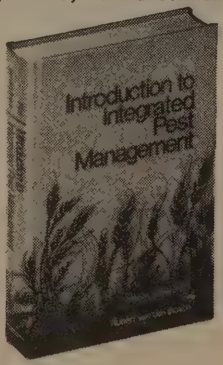
Introduction to Integrated Pest Management

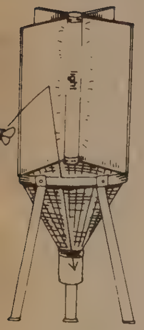
It has been a long wait for this book, which has been kicking around in draft form since 1977. The wait was worth it for two reasons: first, it fills a void, since there hasn't been an introductory book on integrated pest management (IPM) until this one; and second, it allows an interested layperson to get a good grasp on a complex subject without ever having taken a course in mathematical modeling.

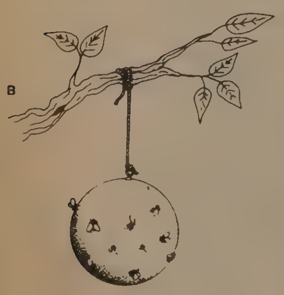
IPM has come into its own in the last 20 years as the shortcomings of strict reliance on synthetic chemical pesticides have become glaringly apparent (the bugs get immune to the sprays, which are oil based and have become very expensive; the natural checks and balances get wiped out, the environment gets poisoned with chemical residues, and we the consumers are flirting with a mess of cancers and things like miscarriages down the road). IPM uses synthetic chemicals, but does so judiciously, and only as a last resort. The system is based on looking at pests in their total environmental context and precedes chemical treatment with natural, biological, and cultural controls. At its heart, IPM works because of careful insect monitoring in the field and the use of computer-built predictive mathematical models of insect behavior.

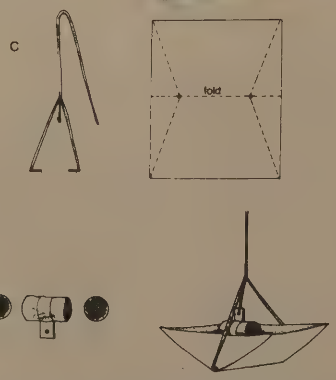
If you make it through this book and want more, or if you are a grower interested in state of the art IPM for your specific crops, get hold of **New Technology of Pest Control**, *edited by Carl Huffaker (1980; $34 postpaid from John Wiley and Sons, One Wiley Drive, Somerset, NJ 08873). This one has all the math for the modeling and can quickly show you why this is presently one of the fastest changing and most exciting areas in the agricultural sciences.* —*Richard Nilsen*
[Suggested by Joel Grossman]

Introduction to Integrated Pest Management
Mary L. Flint and
Robert van den Bosch
1981; 255 pp.
$18.95 postpaid from:
Plenum Publishing Corporation
233 Spring Street
New York, NY 10013
or Whole Earth Household Store









Useful traps for sampling and detecting pest insects. (A) A light trap. (B) A sticky red sphere. (C) A pheromone trap, showing how it can be made with wire and cardboard and baited with a virgin female placed in a small screened cage in the center.

●

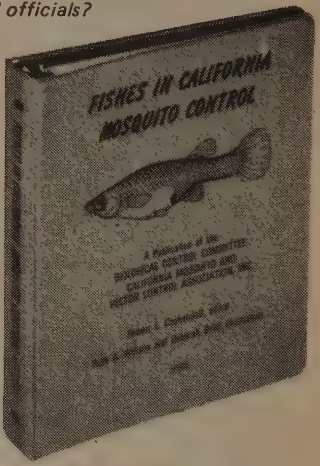
The consumer in the decades before the 1940s preferred "perfect" produce, but if this was unavailable or too expensive, he would be content to wash off clinging insects, ignore holes in his lettuce leaves or cut out the damaged parts and/or worm, and enjoy the rest of the "less than perfect" fruit or vegetable in his favorite recipe. The consumer of the 1980s is rarely given the opportunity to buy damaged or herbivore-infested produce at any price. And the popular conception among marketers is that such "filth" and injury would not be tolerated. This is despite the fact that a few bugs or their damage may have no effect on the nutritional value of the produce and present no health hazard. Ironically, insect parts in canned and processed produce are essentially forbidden by various federal and state regulatory agencies and produce processor stipulations, while minimal pesticide levels are tolerated. Thus we have increased our pest problems over the last forty years by merely demanding cosmetically appealing produce. If we could convince consumers to reclaim some of their grandmothers' standards, some of our "pest" problems would simply disappear.

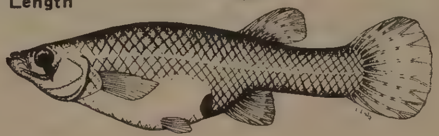
Fishes in California Mosquito Control

Biological control of mosquito larvae using fish has been around since the turn of the century. California has gotten into the business of mass-rearing and distributing millions of these fish not only because it has a lot of rice paddies but also because extensive mosquito spraying has produced several mosquito species that are now immune to any known pesticide. This loose-leaf booklet is designed for mosquito control workers. It describes species of useful fish and techniques for culturing, trapping, and transporting them.

If you live in one of those quaint hick burgs where a pick-up towing a fogger spewing diesel oil laced with Baytex rolls by your front door every summer, or where the biplane flies low at dusk and mothers call their children inside and close all the windows on a stifling hot night, why not buy a copy, read it, and then give it to your local mosquito control officials?
—*Richard Nilsen*

Fishes in California Mosquito Control
Robert L. Coykendall,
Editor
1980; 86 pp.
$15.86 postpaid from:
California Mosquito and Vector Control Association
197 Otto Circle
Sacramento, CA 95822





Mosquitofish, Gambusia affinis **(Baird and Girard), female 4.1 cm (1.6 in) Total Length**

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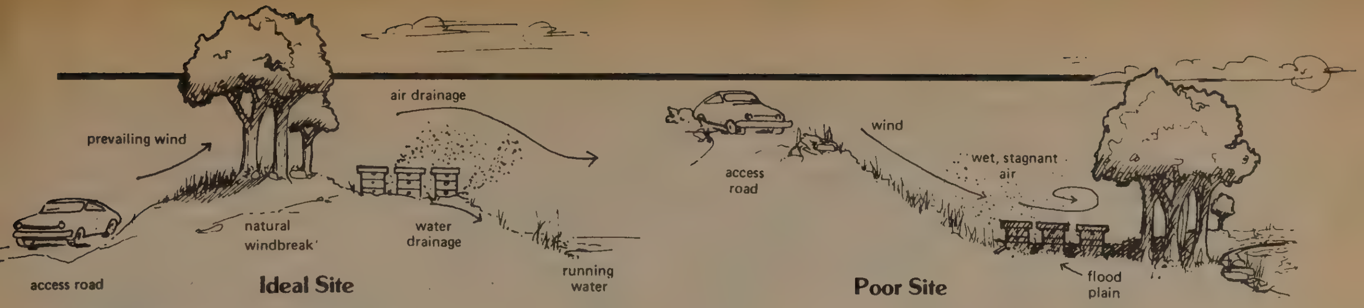
Emerick (1941) made the first adaptation of mosquitofish in California to highly organic waters at the Calistoga sewage disposal plant. He first introduced fish into the clearest of the six ponds. Then every six months he continued to transfer fish from pond to pond until they eventually entered the septic tank and survived. . . .

Mosquitofish have an extremely wide range of temperature tolerance. Otto (1973) estimated cold-acclimated fish stocks in Utah could tolerate water temperatures down to 0.5°C (32.9°F), while warm-acclimated stocks from an Arizona hot springs were observed living in water having a temperature in excess of 42°C (107.6°F).



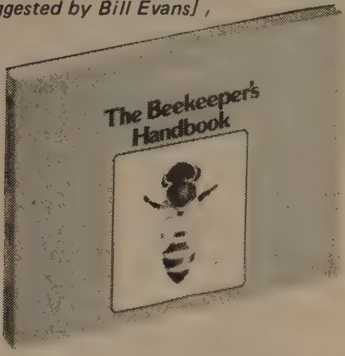
The Beekeeper's Handbook

Here's a book I wish had been around when I started working bees. **The Beekeeper's Handbook** *is a well-illustrated introduction covering most of the basics, from site location and equipment to the installation of package bees and basic management techniques. It's the best beginner's book I've seen, and most readable, so I won't quibble about small stuff like their hang-up on mandatory chemotherapy.*

*Spring is the time to start with bees, and if you've been playing with the idea, the moment has arrived. With this book and some equipment catalogs (***NWEC** *p. 108), you'll be on your way. If you're beginning, you'd do well to find a local beekeeper and thus benefit from someone else's experience. More fun is to make contact with two local beekeepers, for you'll soon discover that they disagree with each other half the time, and then you'll begin to realize that beekeeping is an art, not a science. With this understanding you'll move forward with a more flexible mind.* —*Dick Fugett*

[Suggested by Bill Evans]

The Beekeeper's Handbook
Diana Sammataro and
Alphonse Avitabile
1981; 135 pp.
$10.20 postpaid from:
Charles Scribner's Sons
Special Sales Department
597 Fifth Avenue
New York, NY 10017
or Whole Earth
Household Store



Fifty Years Among the Bees

Ever since I got into beekeeping I'd been hearing about this book. The old timers who wrote for the bee magazines kept mentioning it to show how old they were, because for the rest of us it was an unavailable antiquity. Having spent time searching for it, I finally decided that **Fifty Years Among the Bees** *must have been out of print ever since it came off the presses back in 1915. Used bookstores told me they had a waiting list for it, and the only mention I found of an actual copy being sold was once when a bee book museum bought out the library of some elderly beekeeper, recently deceased.*

Needless to say the suspense was killing me, for desire had created in my mind some hoary volume of ineffable apiary wisdoms which might become the climactic event of my life. Then one day what shows up in **Gleanings in Bee Culture** *(***NWEC** *p. 108) but an ad for the book! It wasn't the real book, which the collectors were paying $50 for, but it was a certified copy of it. Some folks back in New York calling themselves Molly Yes Press had photographed one of the originals and now it was available. My check was in the mail within minutes.*

So now you're wondering — was it worth so much buildup? Actually it wasn't, but that's because I'd been expecting some kind of aparian equivalent to Cosmic Wisdom, which was aiming too high. But the book equals anything else I've read, and on hive management it surely excels, for Miller ran innumerable experiments over the decades and recorded the results with the keenest of eyes. There are occasional passages — how honey was selling for 25 cents a pound back in 1867, for example — that require a different perspective to appreciate, but when that's mastered, **Fifty Years** *will be an addition to both your library and practice.* —*Dick Fugett*

Fifty Years Among the Bees
Dr. C.C. Miller
1915, 1981; 328 pp.

$7.95 postpaid from:
Molly Yes Press
R.D. 3, Box 70-B
New Berlin, NY 13411

Plants of the Southwest

This five-year-old company offers the largest selection of seed for native southwestern plants of anybody. They also sell (but do not ship) plant material and do landscaping locally in northern New Mexico. Harsh desert environments make for some highly adapted and beautiful plants. For example, co-owner Gail Haggard informs us that for local landscape jobs they begin with a soil survey, and "it is rare to find a soil sample with a pH below 8.0 around Santa Fe." That is a main reason why garden books written for the eastern U.S., which invariably advise you to add lime to your soil, are a kind of standing joke in these parts.

Grass, flower, shrub, and tree seed are offered, including more than a dozen specialized wildflower and grass blends. And if you are looking for a source of seed for vegetables like Chimayo chili peppers, boleta beans, tomatillos, or Indian blue corn, they have that too. —*Richard Nilsen*

[Suggested by Peter Warshall]

Plants of the Southwest
Catalog

$1 postpaid from:
1570 Pacheco Street
Santa Fe, NM 87501

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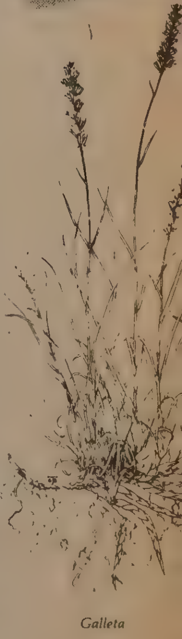
Galleta
Hilaria jamesii

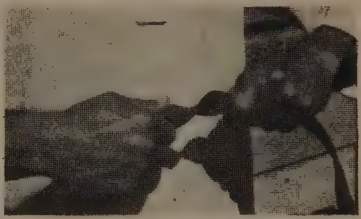
This remarkable native American grass, introduced by Plants of the Southwest, is one of the very best grasses for landscaping, revegetation, and rangeland rehabilitation in the arid West. It is a strongly rhizomatous, sod forming, warm-season grass like Bermuda grass, yet it withstands the cold winters of the high plains. Because of its vigorous, spreading, underground system of rhizomes it is remarkably tough, persistent, and drought tolerant, resprouting even when apparently completely killed by trucks and bulldozers at construction sites.

The dense sod binds the soil, resists erosion, and tolerates flooding. Easy to establish on even the most severe sites. Mowing encourages a tight sod for a durable, water conservative, low maintenance lawn. Very attractive left unmowed in natural wildflower meadows. Good forage on summer range. An especially valuable grass for reclamation and erosion control, withstanding severe winters, drought, summer heat, poor soil, and floods. It is, for the same reasons, an excellent choice for low maintenance landscaping. Wyoming to Utah, south to Texas, and west to California. $10 per pound. 1 pound per 1000 sq. ft.



Galleta

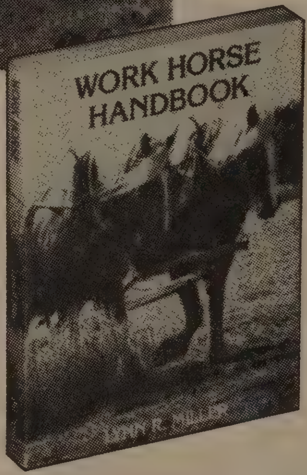
Gary Eagle drilling oats with a twelve foot drill pulled by four head of grade work horses. Gary farms a half section at 5000 feet elevation in Washington state. All work is done with horses.



To test the strength of old leather, twist and pull hard. If it breaks or looks suspicious, THROW IT AWAY!

Work Horse Handbook

Author Lynn Miller has been chronicling the rebirth of workhorses and mules in his **Small Farmer's Journal** *(***NWEC** *p. 116) since the mid-seventies. This superb book is for the novice interested in using horses for farming, logging, or transport. If you are a scoffing farmer ready to dismiss all this as antiquarian idealism, you may be surprised to find out that the arguments here for horses are based on economics. (And besides, how are you going to finance that next tractor, and how much longer do you plan to run it on oil from Libya?) Horses reproduce themselves and eat what's grown on the farm. As with the* **Journal**, *the photos and line drawings are first-rate — well worth a look even if you are content riding your John Deere.* —*Richard Nilsen*



Work Horse Handbook
Lynn R. Miller
1981; 224 pp.
$12.95 postpaid from:
Mill Press
Route 4, Box 68
Reedsport, OR 97467

The Gift of Good Land

Wendell Berry's latest book is now out and around and worth tracking down or special ordering. It is a brilliant collection of 24 wide-ranging essays on the current crisis in agriculture and possible solutions and successes. This is a landmark book because it provides several examples of successful reclamation and farm operations.
—*David Bainbridge*

The Gift of Good Land
(Further Essays
Cultural and Agricultural)
Wendell Berry
1981; 299 pp.
$8.50 postpaid from:
North Point Press
850 Talbot Avenue
Berkeley, CA 94706
or Whole Earth
Household Store

GIFT·GOOD LAND
WENDELL BERRY

●

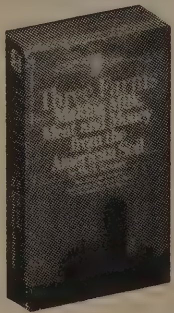
We drove with the sun in our eyes, leaving behind the American city-fringe eyesores (the same in Tucson as in Louisville), and then the further spattering of subdivisions colonized by mobile homes each with its suckling car or pickup truck, and then the irrigated fields — and then, with relief, into the desert itself, where everything but the roadside trash and the road itself looked native, belonging in place.

I was feeling another kind of relief too, often felt before: the relief of moving from talk about problems into the presence of the problems themselves. In the presence of the problems intelligence encounters details. It is like stepping from slippery footing onto dry rock. The relief is physical. And it is hopeful too, for it is in the presence of the problems that their solutions will be found. Solutions have perhaps the most furtive habits of any creatures; they reveal themselves very hesitantly in artificial light, and never enter air-conditioned rooms.

Three Farms

This is the best one-volume look at life as it is lived and financed down on the farm today. The three farms are a New England dairy — with piss and vinegar worthy of a John Gardner novel — an Iowa hog farm, and a California ag-biz "farm," bungling along with "big is better," and fueled by the tax-loss dollars of numerous anonymous dentists. To all of them Kramer brings an eye keen for small detail and a genuine skill at capturing the nuances of rural language. —*Richard Nilsen*
[Suggested by Jim Palmer]

Three Farms
(Making Milk, Meat and
Money from the
American Soil)
Mark Kramer
1981; 266 pp.
$4.20 postpaid from:
Bantam Books
414 East Golf Road
Des Plaines, IL 60016
or Whole Earth
Household Store



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Yankees of the old school are an ominous lot, much given to actuarial pronouncements. Their homily suitable to snowless Christmases is: "Green December fills the graveyard."

●

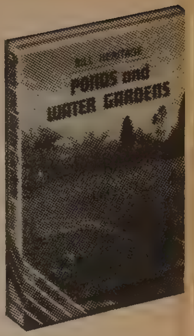
It seemed as if the corporation could buy workers' time, managers' time, planners' time, and even all of their skills, but that to buy a human's sense of responsibility is beyond the reach of big business. Like a lover's love, a prisoner's acquiescence, a parishioner's faith, or a friend's generosity, a worker's feeling of responsibility — of compliant but sensible allegiance to the completion of the chore at hand — simply never comes onto the open market.

Ponds and Water Gardens

This British book describes several methods of constructing ornamental ponds and bog gardens. It also explains how to stock a pond with plants and fish and keep the water clear. Sixty-four color plates are included.
—Richard Nilsen

Ponds and Water Gardens
Bill Heritage
1981; 168 pp.

$8.20 postpaid from:
Sterling Publishing Company
2 Park Avenue
New York, NY 10016
or Whole Earth
Household Store



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Butyl synthetic rubber sheet 0.030 inches thick is the Rolls-Royce of pond liners and, for my money, of all pond-making materials. Its charcoal black colour does not appeal to everyone at first sight. In practice it proves very satisfactory, giving an illusion of greater depth and improving reflecting quality. It makes a far more effective and natural background to the colour of plants and fish than any blue material. The life expectation of butyl is estimated at 50 to 100 years; for obvious reasons the proof of this claim lies some years distant.

Marijuana Botany

This book means what the title says — botany. No males and females here, but rather staminate and pistillate. There's also a forward-looking concern that many rare strains of Cannabis will face extinction once legalization lets multinational agricultural corporations in the door with their "inevitable" uniform patented hybrid strains. Twenty million users in the U.S. and 300 million worldwide are, after all, big business.

Clarke's premise is simple: no good breeding without an understanding of genetics. But the details are complex, although lucidly explained and nicely illustrated. If you have a "what went wrong?" kind of a question and are willing to do some digging, this is the place to look.
—Richard Nilsen

Marijuana Botany
(An Advanced Study: The Propagation and Breeding of Distinctive Cannabis)
Robert Connell Clarke
1981; 198 pp.

$8.95 postpaid from:
And/Or Press
P.O. Box 2246
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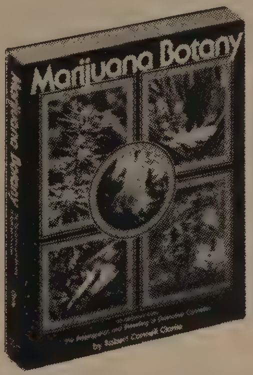

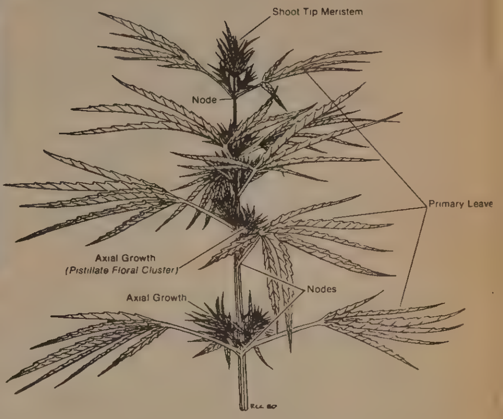

Premature floral stage. Pistillate primordia have formed at the nodes and predominantly vegetative axial growth continues.

Marijuana: Your Legal Rights

If every lawyer could write and explain the law as clearly as attorney Moller does, we probably wouldn't need so many of them. This is a superbly designed and organized book. Reducing drug-related paranoia ranks as a major service, and this Moller does by explaining — with frequent reference to recent case law — your rights: at home, in your car, at the airport, down at the station house, and even before a grand jury. Through it all comes a profoundly scary appreciation of how fragile and much-eroded are the concepts embedded in the Fourth and Fifth Amendments. —Richard Nilsen

Marijuana: Your Legal Rights
Richard Jay Moller
1981; 284 pp.
$6.95 postpaid from:
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Publishing Company
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Reading, MA 01867
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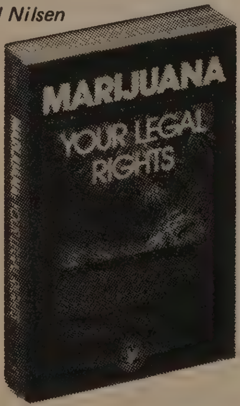


•

Barbara is one of those people who file traffic tickets between the road map of New Hampshire and the old Milky Way wrappers at the bottom of her glove compartment. "I can't afford to pay them," she says. Unfortunately for her, she had to learn the hard way that she could not afford not to pay them.

"Knock, knock."
"Who's there?"
"The police."
"The police who?"

Barbara opened her door.

"Are you the Barbara Lashley who doesn't pay her traffic tickets? May we come in please?"

The police edged their way through the opened door.

"Who, me? Traffic tickets?"

The police stepped in, turning their attention to the living room.

"What's this here on the living room table?" one of the officers asked.

"A water pipe."

"What do you smoke in it?"

"I don't use it. It's a decoration."

"Someone uses it," said the officer, sniffing the bowl. "We have a warrant for your arrest for your unpaid traffic tickets. You're also under arrest for that water pipe. We won't handcuff you, but we have to search around you for our protection — just a formality."

"You can't search my house. I haven't done anything."

"Now, don't get excited lady, we better just look in this desk drawer."

"Ah . . . looks like hashish. Apparently you do use your water pipe. Any other hashish blowers in your home?"

"No, there's no one else home."

"We'll have to check just in case — this could be a dangerous situation."

Question: Was Barbara's arrest legal?

Answer: Yes. The police had an arrest warrant.

Question: Could the State convict Barbara for possession of the water pipe?

Answer: Probably yes. The search was legal because the water pipe was in plain view. The conviction is legal as long as possession of "drug paraphernalia" is a crime, which it is in most states.

Question: Could the State convict Barbara for possession of hashish?

Answer: Probably yes. The "leaping" loophole could justify opening unlocked drawers within Barbara's leaping distance at the time of her arrest, without regard to actual necessity. The police could easily say that Barbara was standing next to the drawer.

Will Baker lives single, teaches writing, and farms almonds in Davis, California. His fiction has appeared in CQ before. This contribution he calls his "first attempt at bareknuckle gonzo journalism. It is all true, and that is often a bad sign." In sending this story of losing at love, he wondered if one ought to talk about such things in front of strangers. O yes. It saves them from thinking that their deep misery (inevitable with a jilt: man or woman, it hurts like dying) is unique. The backdrop for this true tale is Nevada — wide open, weird, and just the place to get married or divorced in a hell of a hurry.

—Stephanie Mills

The Legend of Great Uncle Jim and the Woman Behind It All

Text and photographs by Will Baker

THE LADY IN RHINESTONE glasses at the Winner's Inn wasn't just sure how you got to Tuscarora. She knew it was 80 miles from downtown Winnemucca, and believed there was pavement as far as Golconda, but after that it was all back roads, and likely no signs. I should ask at the hardware store, where they had county maps.

The hardware lady — clean Levi's, hair dyed jet black, an evergreen smell — helped me to find the right map. Elko County is about the size of Delaware, and appears to be mostly back roads. The roads run in long and lonesome lines through immense sagebrush basins bounded by worn but impressive mountains.

The region is inhabited mainly by jackrabbits and jet fighters, with an occasional far-off peg of a man aboard a horse. Sometimes in the basins there is a slate-green river (forks of the Owyhee or Humboldt); sometimes a wide, shallow lake; sometimes a mirage. Ranches hereabouts run from little ones of 5000 acres to good-sized spreads of 100,000 acres or more. From a rise in the road you occasionally see one: a distant clump of poplars, not bright green but at least different, maybe a glitter of aluminum from a trailer. What you will see mostly is rabbits.

Before the ranches were the mines. All over the map you can see the little crossed picks and shovels: Old Timer's, Silver Cloud, Midas, Little Jewel. Tuscarora was the biggest in the whole northeast corner of the state until 1904 when the price of silver and the depth of the shafts didn't figure out right, and they began to pull the pumps and let the water take over. At one time the population was given as 10,000 — probably on the high side the way all miner's estimates are — but it was mostly tents, a little wood and less brick. Now the hardware lady guessed 20 people might be living there, but no motel, no store, not even a bar, and the road was one of those checkered lines identified as a "gravel road, not graded or drained." Might be tricky this season, she said. They'd been seeing some rain up there. A Volvo? Maybe. She looked vaguely encouraging.

The mountains were shrouded in high mist and light squalls were blowing through when I took the

He was a big man, a mountain of a man, strong as a bull, and he died full of lead with his boots on.

Golconda exit. Gray rain. And raining also in my heart – to embroider a little C & W on the edge of this tale – since I left Reno, where the dark-eyed waitress at Harrah's said it was a good pass and she would have been more than happy to consider it but she had plans after work to catch the tail end of Charlie Daniels' last set, and next week when Willie Nelson went through it was the day before her birthday and she had a date with her dad. I wondered if I was still younger than her dad and told her again about her smile and ordered another whisky, because there was some chance, maybe a good chance, she was lying. ▼

Illustrated by Michael Moore

I hadn't planned this essay in historical research at all this way. It was just a loose chip from my childhood, an Ancient Mariner charm or virus that I picked up, listening by the woodbox while my dad and my uncle Jess told the story of Great Uncle Jim, the family's only honest-to-God straight-up-and-down hero. Of course they also told bear stories, and tried to figure out how the Bakers were related to Quannah Parker's Comanches, and retold their own father's exploits as a cowpuncher on the Chisolm trail. But the saga of Uncle Jim in Tuscarora was the big story, I could see that. They told it more often and they told it differently. Still in his galluses and ironpants, smelling of pitch from a day in the woods, my father would lean forward and grip his knees in his big-knuckled hands and shout at my uncle.

"A big man by God."

"Mountain of a man." Jess always spoke as if dad had gotten it wrong.

"He did for that sonofabitch."

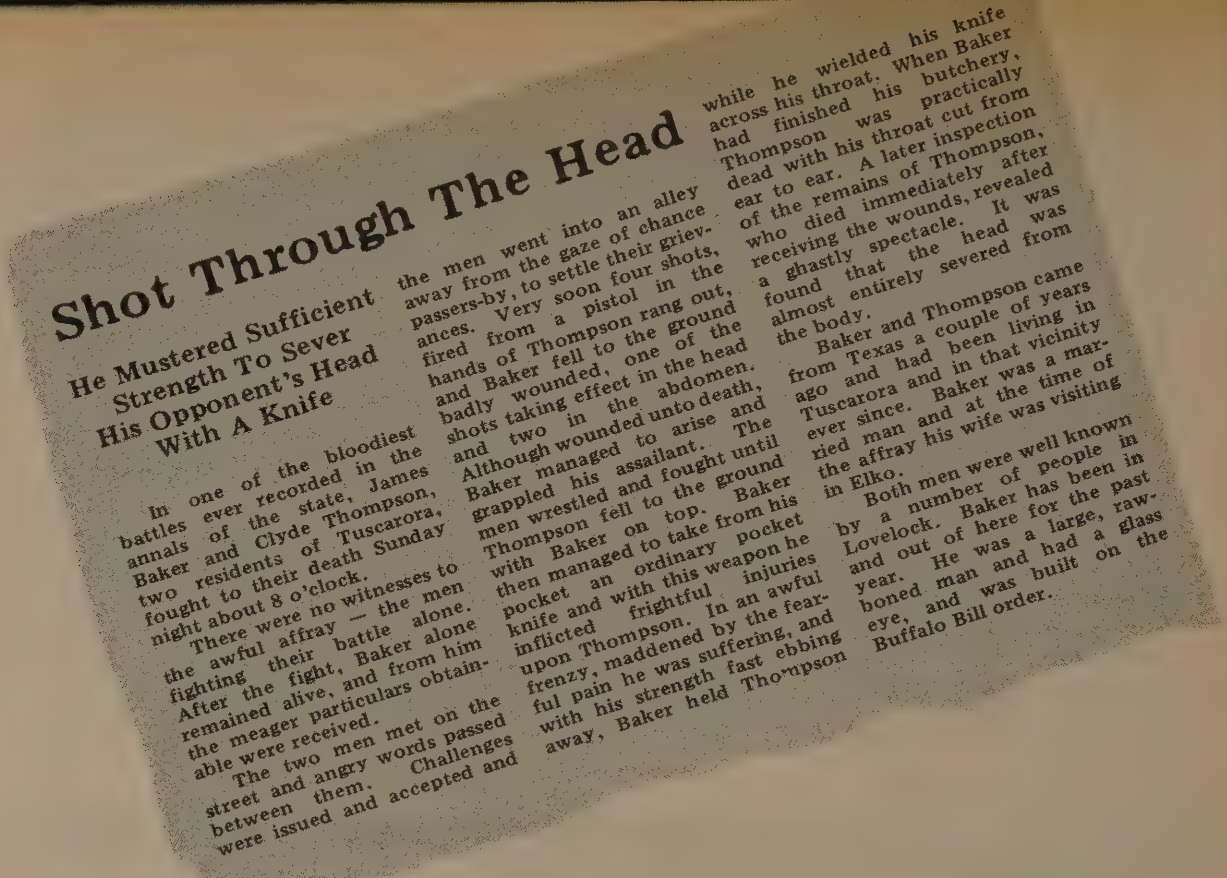
Jess would snort and look away into the ceiling. "Did for him? Jesus Christ, did for him? Cut his goddamned head off, is what he did."

And so they would go back and argue over the whole thing again. How Jim had been carving on the hitching post with the clasp knife, how the other had approached, what they had most likely said, whether the other man had shot Jim in the alley or in the basement under the saloon, and on and on.

I knew other stories like that. In fact once dad had come in from fighting fire to tell my awe-struck mother that a trail boss, one of the Reed boys, had shot one of the loggers who got drunk and came for him with an axe. That didn't kill him though, dad observed in some disgust, it was the other dumb drunk sonsofbitches who tried to pack him out and didn't know how.

But Great Uncle Jim was different because he was our own blood. He wasn't in any picture books, or famous anywhere else, but he was all ours. My grandfather had known him personally. He was a big man, a mountain of a man, strong as a bull and he died full of lead with his boots on. At that age I read a lot of Zane Grey and trashier stuff as well, and it was easy for me to elaborate on the skeletal ballad my dad and uncle were chanting. I could see Big Jim in my mind's eye, see the street, the dustdevils and tumbleweed, the weatherbeaten buildings, the horses shying and stomping in apprehension.

Some of the details made me uncomfortable, and to myself I fudged around them to get the heroic action I needed. It seemed to me Uncle Jim should have a gun too, a blazing gun, and they should walk up the middle of mainstreet toward each other, saying finally, "All right you dirty sidewinding _________, go for your iron!" or the like. But it wasn't like that, I really knew. It was surely much more like the Lovelock Tribune had it in their edition of June 6, 1909:



Shot Through The Head

He Mustered Sufficient Strength To Sever His Opponent's Head With A Knife

In one of the bloodiest battles ever recorded in the annals of the state, James Baker and Clyde Thompson, two residents of Tuscarora, fought to their death Sunday night about 8 o'clock.

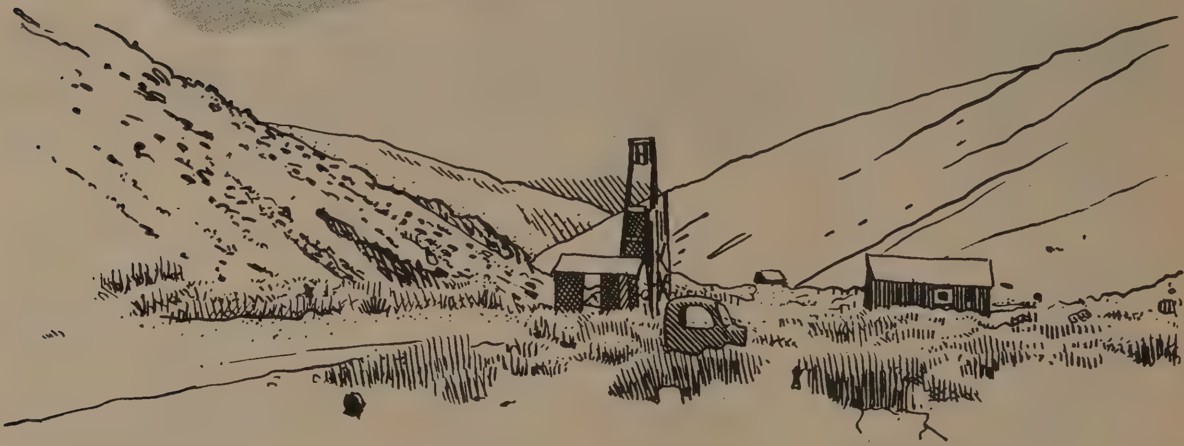
There were no witnesses to the awful affray — the men fighting their battle alone. After the fight, Baker alone remained alive, and from him the meager particulars obtainable were received.

The two men met on the street and angry words passed between them. Challenges were issued and accepted and the men went into an alley away from the gaze of chance passers-by, to settle their grievances. Very soon four shots, fired from a pistol in the hands of Thompson rang out, and Baker fell to the ground badly wounded, one of the shots taking effect in the head and two in the abdomen.

Although wounded unto death, Baker managed to arise and grappled his assailant. The men wrestled and fought until Thompson fell to the ground with Baker on top. Baker then managed to take from his pocket an ordinary pocket knife and with this weapon he inflicted frightful injuries upon Thompson. In an awful frenzy, maddened by the fearful pain he was suffering, and with his strength fast ebbing away, Baker held Thompson while he wielded his knife across his throat. When Baker had finished his butchery, Thompson was practically dead with his throat cut from ear to ear. A later inspection of the remains of Thompson, who died immediately after receiving the wounds, revealed a ghastly spectacle. It was found that the head was almost entirely severed from the body.

Baker and Thompson came from Texas a couple of years ago and had been living in Tuscarora and in that vicinity ever since. Baker was a married man and at the time of the affray his wife was visiting in Elko.

Both men were well known by a number of people in Lovelock. Baker has been in and out of here for the past year. He was a large, rawboned man and had a glass eye, and was built on the Buffalo Bill order.



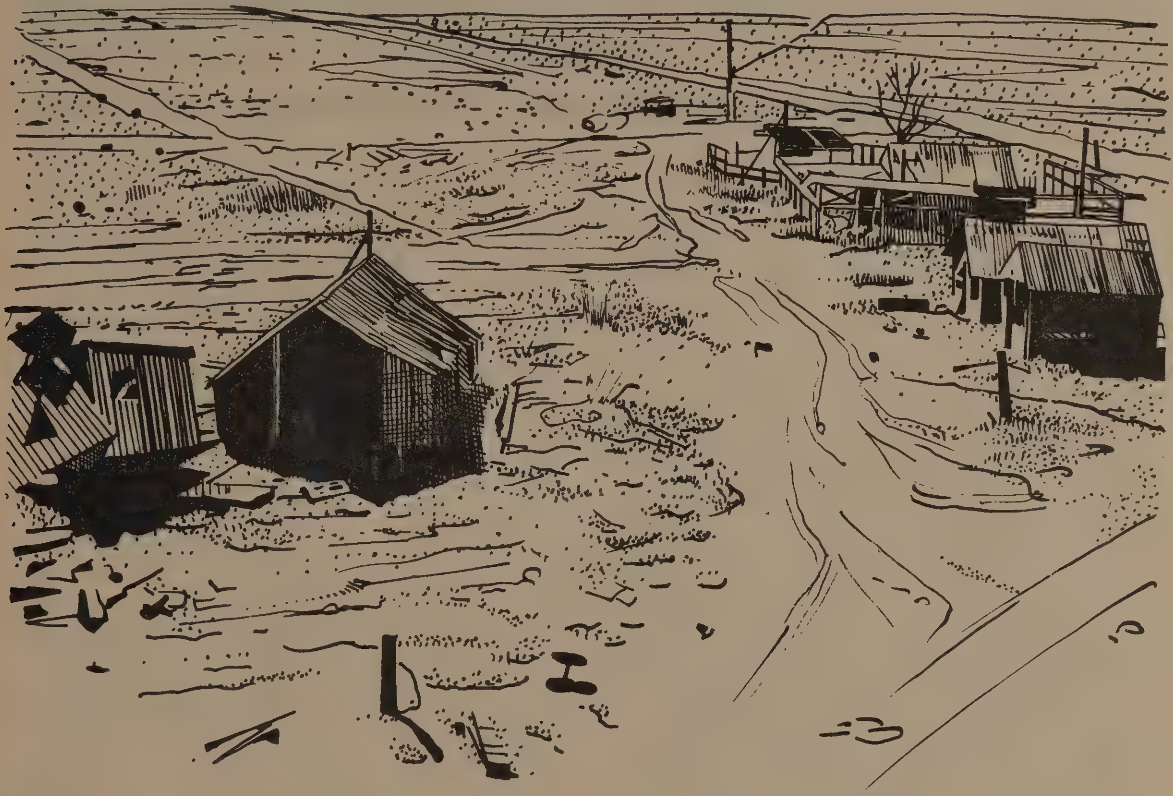
I was on the gravel road not graded or drained now, climbing gradually. The plain fell away in a long sweep to the south, in colors of ash, rust and ghost green. To the north and east the mountains reared, pocked and rotten rock breaking through the flanks of some, a light shawl of snow on the highest. Between these peaks and the thunderheads stacked above them were caverns of shadow, gunmetal blue and dark gray with sometimes a tone of rare, deep mauve.

For twenty minutes I didn't pass a vehicle, and then a muddy old Chevy ton-and-a-half truck with no fenders and a load of hay went by. The two inside looked at me flat from under their wide brims and didn't smile. The ruts had set like ridges of concrete and the Volvo slathered along in them, the steering wheel jumping under my hands with its own life.

Lonesome country. That brings up another bothersome detail of the Uncle Jim story, a detail that as a boy I had little use for, but which now, especially now, suggests itself as perhaps the central one, and maybe explains why I was driving myself ruthlessly over this godforsaken 80 miles. Dad and Uncle Jess used to refer in a veiled way to "that woman." The Woman Behind It All. When I was eight I didn't know what it was women were behind, and certainly didn't think one of them without even being present could push those two men into the alley and lay them out there in each other's blood. But now I know. Just now I was in fact myself remembering and trying hard not to remember a sweet smile, a beautiful behind, a cheating heart — a combination that can cause one considerable grief. I was right in that time when everything you ever said or did to her appears wrong, when she seems more powerful and glorious and radiant, in your overheated memory, than the mere human you took for a movie and pizza; the time also when this vision suddenly chills and darkens because a shadow has crept beside it, a ▼ faceless shadow that she turns to, smiles at, reaches for, kisses, tongues, opens. . . .

A shock as from crossed wires and a burned smell. For your own welfare, from a sense that you are teasing something that is too mad and ravenous for the cages of your mind, you jerk away. There is a numb time. The fenceposts flicker past. Then a word from an old song or a scene from happier times starts the deadly loop all over again.

I smoked for a few miles, because that is one of the things I do at these times. Besides propositioning cocktail waitresses and Keno girls. Maybe because they wear black. Then I pulled up at a place, a scatter of shacks and corroded trailers trying to squeeze under half a dozen ragged cottonwoods. Kirby's Midas Tavern said OPEN but wasn't. Parked in yards were various vehicles, mostly not operable, but one trailer had a wash flapping out back in the cold wind. I got to the front door and there was a phlegmatic man in a plaid shirt to meet me. Yep it was the right road to Tuscarora back there at the fork over the bridge. Might or might not be passable. He had seen a little foreign job go over it yesterday, so maybe. Nothing there, in the way of accommodations. He stopped, blank, so I turned and left.



Maybe the old woman was dead anyway. Distant Cousin Earl, an affable teacher of Industrial Arts from Sacramento, one summer four years ago drove his spanking RV to Tuscarora to investigate the family legend. He reported that he met an octogenarian lady who had lived in the town all her life, and who as a girl of 19 had listened to the excited gossip at the stage depot on that June afternoon when two men died. So there was somebody who might know things about this last detail, this Woman Behind It All.

But only gossip. Dinnertime gossip 70 years old. It was beginning to look less and less like a sensible day. Maybe I didn't care whether the old lady was still alive, or whether she could remember anything if she was, or whether what she could remember would reveal anything to me. Maybe I was just driving, and driving now in steeper country, swatches of dirty snow along the roadside, so I could think about how her hair cascaded down over that beautiful behind and how she came to me sometimes like a wave from the other side of the ocean, and think safely about such things, not being able to put my head in my hands and bawl, because my hands had to be on the wheel, still spinning and jerking from the hard ruts.

▼

We have to stay friends. Friends. Thought I'd drop over, friend, and try out this double barrelled twelve gauge.

It is another thing you can do, besides smoke and make hopeless passes. You can drive. I had done it before. The first time especially. If you've heard this one don't stop me.

A man has a job and a house and a car and a wife and a kid. He loves them all and worries about them approximately in that order. For years they hold together; they interlock: the wife takes the kid in the car to the school while the man does his job and then for a few hours they all fall asleep in the house and leave it again early in the morning. One year small things change. A neighbor drives the kid to school but the wife disappears with the car anyway. The man pursues the job so far he does not fall back into the house some evenings. There are parties and dinners and some people leave before others. Finally some people don't even go. Glassware may be broken. Things are said which have a magical effect of suddenly diminishing greatly both the person speaking and the person spoken to. One day the wife takes the kid in the car and does not come back, ever, to fall asleep in the house.

The man gets another car and he drives. He drives perhaps all night. Sometimes he gets someplace, where he smokes a lot, and drinks too, and makes passes at people. Or he drives around looking for her, the Woman Behind It All, parks near her house, waits. Perhaps she arrives finally and is with someone else, the shadow, and he can hear them laugh in anticipation on the way to the front door. So he begins driving again.

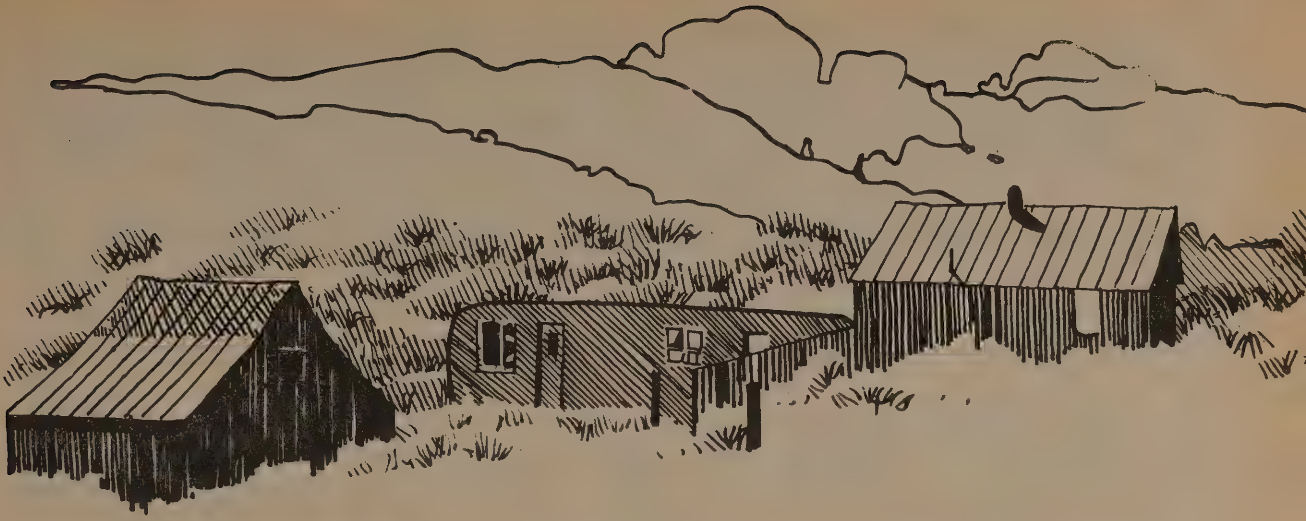
We must talk about violence now. In my case, not that uncommon, it was the self hurting the self. I cut myself and tried to take too many pills, but not very seriously. Some of my friends did it much better with the bottle and the automobile. An odd thing, that when the Woman goes away or at least plays away, a man looks for a quiet room where he can hack himself or eat oblivion. Not everyone of course. These are modern times. There is a new school of thought, according to which one is cool, one shrugs, one keeps an "open relationship." I have seen a few of these open arrangements up close. One from very close. I want to report that I find, beneath the casual laughter, the worldly winks, the arch jokes, the same hard and horny core of hate, the same murderous undertow that exists in the ghettos of common love.

These days everybody is a shrink, so everybody knows that the modern man who turns the blade on himself or goes in for revenge fucking is only taking a substitute. What he really wants to do is kill the two of them, or at least the rival, but society frowns on this sort of direct action.

The implication is, must be, that to take such steps is a serious aberration, not to be countenanced. A whole rhetoric has grown up to mask these raw animal feelings. I understand your position. My needs are not being met. We have to communicate honestly. I respect you. The children are the most important thing. We have to stay friends. Friends. Thought I'd drop over, friend, and try out this double barrelled twelve gauge.

Perhaps some people do not believe in these powerful and sinister emotions. Perhaps most men are only "upset" or "disappointed." Perhaps only a few discover such Neanderthal strata in themselves. But when I watch my friends go down into divorce, I see the same external signs I know so well. The nicotine insomnia, the sudden and indiscriminate lust, a pale and haggard mien that reminds one of consumption, an inner, eating fire. They've got the tiger by the tail.

So maybe I am a rare and dangerous Neanderthal aberrant, and so was Uncle Jim. Western genes. I do know that the second time around it got just as hard. A very modern affair, this second one. Massage and good dope and the Sierras. A blonde. She ran into a Jewish psychiatrist with a swimming pool in Marin. And I began to understand some things. I understood the Nazis. I even understood David Berkowitz, the chubby young man who could not resist the thrill of firing a .44 magnum point-blank into the faces of pretty girls. I understood rape. On certain days directly after sensing the first nub of my antlers I saw some very terrible



little movies inside my skull, while I drove the Volvo around like a zombie. The psychiatrist did not get off easily either.

I was not proud of being the producer of these ghastly little flicks. But they were hard to control. I thought I might be crazy and sought help. Of course it had to be another Jewish psychiatrist. With detachment he helped me to translate the horror shows scene by scene into the new rhetoric. He encouraged me to talk this language to others, and indeed after a time I did not feel so weird and began to think nice thoughts about my ex. You know, communication and acceptance. Two years later we all three chatted around the swimming pool, heated and deductible because of his bad back, and admired their new baby. We were modern and normal again.

The rain picks up and the mud ridges are now slick on the surface. It occurs to me that I could be stranded here all night if I try to straighten out one of these curves. Since the haytruck I have encountered only two four-wheel-drive pickups, travelling fast, the drivers at the last moment lifting two fingers from the steering wheel in an ambiguous gesture. I have a bag of oranges from my tree in California and one thin Mexican blanket, which is not much to pit against a gusty and moonless night on this high desert. But after making a couple of hills in second gear I drop into another of the basins and see on the other side a cluster of buildings perched on the side of a considerable peak. Mount Blitzen, according to the map.

On the last rise before town I see higher on the mountain some tailing heaps and a ruined smelter chimney. Otherwise Tuscarora is mostly weathered trailers, a few sagging frame houses, and one geodesic dome covered in asphalt paper. All of them try to squeeze under a dozen ragged cottonwoods. Beside the post office there is one square, ancient adobe building, but the windows are boarded shut. I park in what looks like the middle of whatever this is, and see a wooden sign MUSEUM on the back porch of one old house. A woman in a down jacket, supported by a cane, moves toward me from another house across the street and we exchange pleasantries. No she is not the particular old woman I am looking for. I must be after either Dela Phillips here at the museum or Nona Trembath in the white house at the end of the street there. They're both over 80. Both been here always. Ring long and hard at Dela's. Hard of hearing.

I thank her and walk up the steps to begin ringing long and hard. Dela may be hard of hearing, but she certainly does not look 80. Hair dyed a bright carrot, she still fills her loose rayon blouse and her eyes are huge and warm behind coke bottle lenses. I introduce myself as I am led into the museum, also her living room, and she brightens.

"Why sure they was two of them and one had a wife, her name was Edna, and a kid too I think. And man number two come along and they was something went on before, used to be his wife then I think, and they fought out there in the street. There was a saloon right across from that old brick building and they rolled down in the cellar under it. One had a gun and the other a knife I think but I don't know who shot who. Which one was your uncle?"

"The one with the knife."

"That was one of them, all right. I was only eleven, you know. We had the dinner station where the stage came in, and I heard the people talk about it. We fed 75 people a day there sometimes."

The porch windows are stacked full of old pink and violet tonic bottles, lending an Edgar Allan

When I was eight I didn't know what it was women were behind, and certainly didn't think one of them without even being present could push those two men into the alley and lay them out there in each other's blood. But now I know.

Poe hint to the light. In the main room there are glass cases full of chunks of rock frosted with crystals, cut stones and turquoise, and an assortment of combs, carbide headlamps, button hooks, revolvers, cuff links, crimpers, augers, and the like. On the wall, several racks from big bull elk; also a row of guns including a Sharps buffalo rifle and several Winchester and Henry repeaters. Also many pictures of men beside steam engines or on ore cars: burly, moustachioed men not given to hilarity. Other pictures of twelve-horse wagons stacked with sagebrush (Dela explains that the smelter ate up all the brush for miles around; 500 chinamen grubbed it out with hoes). The usual heyday hilltop views of a sprawl of tents divided by roads of churned mud.

"So everybody was scared to go down there, wouldn't even get close to the saloon. Finally they heard one man hollering and they came to see. I don't know which one it was —"

"My uncle."

"— one of them hollered out 'Come and git me I don't want to die here with this sonofabitch.' They pulled him out but the other was already dead, cut up something awful. The other didn't live too long after that. Your uncle. Where was he from?

"Texas, I think."

"That probably accounts for some of it." Dela laughs. "They say." She moves to one wall beside an old pedal pump organ. "Here's a picture of that woman. Edna."

It is one of those man and wife portraits in a little oval frame with a cloudy backdrop, woman in the foreground and turned a little to one side, below her master. Hard to tell about these images of femininity from bygone times; the coiffures and starch and whalebone usually obscure whatever it is that made the blood leap then. But this time I think I can see it. A petite woman, dark eyes and hair, though perhaps a little full in the cheeks for the small, fine nose. Not exactly a smile, but just conceivably that other expression that goes a shade beyond a smile in the direction of the devil's casino.

"That fella ain't either one of them. He was my husband's uncle. She married him afterward and they moved East. So she got into the Phillips, my family."

Dela beams at me, happy at this relation, however distant. Then there is a tremendous shock of thunder and the pink bottles chatter excitedly on the sills.

"Sonic boom." Dela nods reassuringly at me, and waves generally west. "It's the Navy over there."

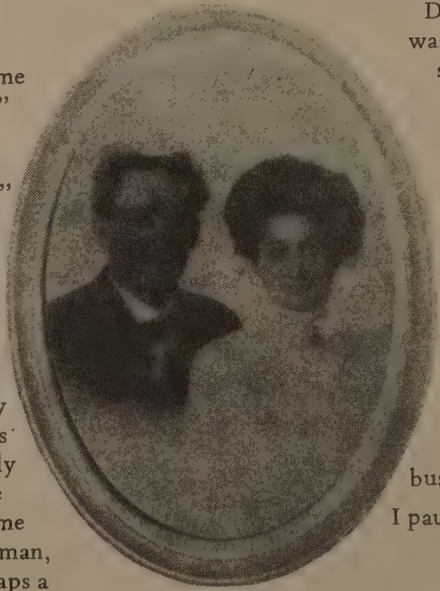
The Navy, of course.

"We had a big ranch. Not big like Spanish ranch, but we had 10,000 deeded acres and 3000 head of cattle. We sold out to Bing Crosby." She pauses and I murmur. "Yes, we knew him and his family real well. They come here often but then of course they sold it after he died. Here I'll show you the gun that killed the first man in Tuscarora."

I look at the old Colt under the glass. "Interesting," I say and tap the case. "Were there lots of murders here?"

Dela laughs. "Oh no. Tuscarora wasn't a real wild town. One man shot over a water deal I remember. Oh of course when the range hands got through with riding for two months and got their three days they would hit for town on horseback and when they got to the top of the hill they'd start shooting and come at a dead run. After three days in town they'd have to go back and the boss would come around to the saloons then and settle up for their damage. You know just busted glass and chairs and such."

I pause before a magnificent slab of polished, petrified wood.



Edna, the Woman Behind It All, with her third husband

I have seen a few of these open relationships up close. One from very close. I want to report that I find, beneath the casual laughter, the worldly winks, and the arch jokes, the same hard and horny core of hate that exists in the ghettos of common love.

"Sequoias." Dela shakes her head. "Thousands of years ago you know those sequoias, that's the big redwoods, went from coast to coast. This whole country was tropical then you know."

I examine the red and yellow whorls of the grain.

"Were the mines going then, in 1909?"

"They was downhill then. Last big mine closed in 1916. Hardly anything left of those days now. That big adobe block building there. Used to be the lodge building, Masonic and Odd Fellows and Knights of Pythias all together. Would you sign the register?"

I notice behind the register a hand-lettered sign that lists the admission at one dollar. I pull out two.

"I'm paying double, ma'am, for all your help. And I want to take some pictures. Now what happened to all that machinery?"

"Why thank you sir. There was all kinds of machinery for a while, all those pumps and engines and the little ore cars you know just rusting away. Between wars they picked it all up and sent it to Japan. For scrap."

Japan, of course.

I shoot a few pictures, thank Edna for her time, and then ask about Nona Trembath.

"White house on the corner. Now she'll tell you all about that business. She's older than I am you know." She blinks the huge brown eyes and smiles. "Sure enjoyed it."

Walking down the muddy street under a cavernous sky, the cloud cover now showing a rift or two as the wind stiffens, I think about those men in armbands and narrow collars and moustaches. How they handled the open relationship. I know I wouldn't care to be a party in any such arrangement with most of them. I suppose they came to this place, these vistas of empty air and dry plain and ugly rock, for the silver and gold, which meant for the money and the power, the silk and the wine and the cheroots, which meant ultimately the women. And most of them didn't find it. But that didn't get rid of the need. The Big Need. Men's needs were probably not being met here in Tuscarora in 1909.

A little bell tinkles when you open Nona's gate, just for the opener's pleasure. For Nona there is a regular doorbell. I see her coming through the window in the door, warped a little in the glass. She looks under five feet, but erect in a faded cotton dress. She too wears thick spectacles, and over the right lens is taped a square blue wrapper from some powder or tablet. I am directly invited into the cluttered, too-warm room, and state my business.

She commands me to sit in the overstuffed chair and then she begins at the beginning and lets me have the whole thing, pausing just a moment for me to finish fumbling with my notepad, speaking in bright, flat prose.

"Yes, Baker and Thompson. One was one-eyed, a great big nigger. Baker I think that was. Happened on Celebration Day. Thompson was stayin' here in town. Real quiet fella. Never said nothin' to nobody. Baker was working on a ranch, Roseberry's place. He was a real bulldog. They say he'd slip off a wagon and throw a steer right flat on the ground. Had a wife or said it was his wife that he kept on the ranch there. Anyway after this Thompson came around he spied on 'em I guess and this particular day he and Baker started something and then walked down the alley by the saloon. The real fight started there. People heard shooting. I guess they rolled down into the cellar

The old brick building across from the saloon where the fight started

and for a long time everybody was afraid to come near, but finally this Baker threw the cellar doors back and walked out. He said 'I won't die in there with that sonofabitch. I did for him though.' But he never lived past seven o'clock that night. The other fella had his head cut almost off, just a little skin holding it. I know that because my dad helped the doctor sew it back on. People asked Baker what the trouble was and he said 'Ask Shorty.' But when the Sheriff went to find Shorty he had cleared out. To Idaho. The other thing this Baker said before he died was "Do something for me. Don't bury me in the same grave with that sonofabitch.' But they did anyway. This is hard ground. Well everybody figured that woman was Thompson's wife somewhere else and this Baker run off with her, and come here and introduced her as his own. But the funny thing was a few months later the Sheriff got a letter from a woman out in Nebraska or someplace asking about this Jim because she said she was his wife and wanted to know if there was anything left, like an estate. There wasn't anything of course but an old saddle and bridle not worth much."

Somewhere in this tight weave I got in a question about the one eye, and Nona said yes she was sure about that. He was a good fella too, cordial, and could pitch hay like the dickens. Then the postmistress tapped and came in, and they talked about an unfortunate accident two nights ago. An old man died in a headon collision on Highway 95 out of Winnemucca. "He was 80 years old and wouldn't wear glasses, that's why," Nona observed. They moved on to talk about the square dance coming up. The postmistress said they might even have enough for two squares.

During this interlude I am still thinking of the woman in Nebraska who wasn't the Woman Behind It All but who was the other kind, the Woman Left Out. Probably left on a bleak sodhut homestead with a band of ragged, whining children. Left for a little tramp with something deadly in her near-smile. Why does a Woman Left Out stick it through, raise the kids, plant and plow, bake bread and gather cow chips, while the man with his Big Need turns to murder? I am speaking of a general pattern, knowing of many exceptions, those Frankies who toted .44s into barrooms or took their men apart with a razor. But generally not. Generally men do it.

I do know the feeling, if not the reasons. There is some connection with the children. In our time women take the kids when they leave, and whether fair or not it releases some deep, dangerous force in a man. After the first numb horror you go molten at the core, something rears and begins to rage. Every nerve twangs to some ancient battle song. When it happened to me, that first time, I felt the voltage in my nervous system take a quantum leap. I slept maybe four hours a night for a month, smoked three packs of cigarettes a day, and scrawled pages full of drivel. I also hatched plots. Shoot him with my deer rifle, take my daughter and hijack a plane to Cuba. Attuned to such possibilities, I began to notice how much of that was going on in the daily newspapers. In the very city I was living in somebody tried it; he holed up in a maintenance shed at the airport with his child and made demands, mostly on his ex-wife. The FBI sharpshooters did for him and his Neanderthal genes. The kid was unharmed, though spattered with her daddy's blood.

Most of the time I knew in some chamber of the brain that these fantasies would not be realized, were only some kind of imperfect psychic pressure valve. Outwardly I taught classes and went to committee meetings and mowed the lawn, and smiled and thanked the neighbors who brought sympathetic hot dishes to the Abandoned One. But the heaving magma was still there inside. A wise old friend came to visit and told me I was still normal. However, the tremendous energy I felt was an illusion. "You probably think you can uproot trees," he said. "Actually you are very tired and probably not functioning at peak efficiency." Maybe so, but during that month I built a hell of a fence, played some outstanding touch football, and wrote the only sonnets of my career.

“One of them hollered out, ‘Come and git me I don’t want to die here with this sonofabitch.’ ”

And no experience of my lifetime has ever matched this one, the loss of wife and child, for sheer savage intensity. I felt positively luminous with adrenalin, and if ever I was capable of – or thought with relish about – walking down a dusty alley to meet another man with a gun, it was then.

After the postmistress leaves we shift the conversation to Nona herself. She has removed the paper wrapper patch from her spectacles, and her eyes are magnified like Dela’s, but they are a different, odd color. It is the color of this country, a subtle blend of gray and green and brown.

“I’ll be 90 come the 13th of October. I was married a year or two after we’re talkin’ about, 1911, to a Welshman. We saved up and bought a ranch to get him out of the mines. He was a Cousin Jack, we called ’em. Welshmen and Cornishmen. Good miners. In one of the other big mines they had Irish, so the shifts had to quit at different hours, otherwise the Jacks and the Irish fought all the time. We bought 878 acres and a hundred head of cows and ran it until he died in 1941. Bad lungs, from the mines. Nicest man you’d ever want to know.”

One of the lucky ones, I think. There were three men for every woman in this territory then. And Nona is pretty clearly not an ordinary woman.

“First thing I had to do after he died was prove up title. My name wasn’t on anything, just his. I spent $3000 on lawyers and accountants and assessors to keep that place. And I ran it myself. When I sold it in the fifties – you know who I sold it to?”

I shake my head but I think I already know.

“Bing Crosby. Yes sir. And when I sold it I had 1700 acres, 200 head of sheep, 250 head of cows and I put up 250 measured tons of hay every damn year. I wasn’t sittin’ down.”

I keep a respectful silence.

“I wrote a story about that and they printed it in the Elko paper, I’ll show you. And the Deseret News in Salt Lake sent a man here and they wrote me up.”

She is swift on her feet and knows just where the clippings are. I look them over. Woman Runs Ranch By Herself. Gal With Gumption. Pictures of Nona in overalls and short hair beside her saddled horse. Her life laid out in the same level talk over 68 column inches, including two paragraphs on Great Uncle Jim.

“I got five proposals of marriage after that Deseret News story. Men just wrote from anywhere, even Canada.” She laughs. “One fella wanted to know just how many head of cows I was running, before he completed his proposal.”

She was, I suggest, interested? Oh no. One man and he was the nicest you could want.

What is it women want out of men?

“Kindness.” Quick as a rattler. “See her wants before she does.”

I work on that by myself for a while.

“Say, you want to see an ounce of gold?”

She returns from a back room with a little clear plastic locket full of dull yellow grains.

“Got that chain from Buckskin Jack. He wanted to know where the gold come from.” She sees me smiling.

“Oh I know some fellas with nicknames.” She looks at me sideways, devilish. “Buckskin Jack he was a big nigger like you.”

“You got a name for me?”

“Don’t know you well enough yet.”

“I’ll bet you make up those names.”

“I do no such a thing now. You just look, I got a list of ’em and everybody is somebody I knew or heard about. Look here.”

She produces a sheet of paper from her album and I read through the collection:

Flyspeck Bill, Crooked Neck McCray, Dirty Shirt George, Cream Puff Ike, 25 Pinky, The Denver Sheik, Fade Away Kid, Chippie Chaser, Tamale, Silk Hat Harry, Bolts and Nuts, Seldom Seen Slim, Snake River Pete, Gimme Kid, Scissor Beak and of course Buckskin Jack.

Then there is Gold Tooth Bess, Broken Nose Helen, Dirty Neck Grace, and Bull Shit Alice.

“Some women here too.”

“The Sportin’ Girls. There was a big Sportin’ House here. These people come from all over – the Klondike, Australia, Wales.”

“Couldn’t hide their flaws.”

“Land no, everybody got a name right away.”

“Were there fights over these sporting ladies?”

“No, not much. Fellas didn’t seem to fight over them.”

A pause, while I work to come to the question I

Nona Trembath

realize I have been heading for, have driven 600 miles to ask.

"Why do men do that?"

"What: Sportin'?"

"No. I mean why do they kill each other, like Baker and Thompson?"

"That's nature. You see a lot of that."

She waits, alert and confident, but no followup question occurs to me.

"Not so much like that nowadays. Now there's always something else comin' along."

I keep silent, wondering if that makes the difference. What if I had not been able to foresee another after the first, and again after the second? What if this last one, still haunting the freeway with me, were the absolute last? What if no waitress or Keno girl would ever smile at me again except to increase her tip? Would nature then push me to murder?

It could not be that simple. Mr. Thompson did not have to hunt Edna down; there must have been others available — at least Bull Shit Alices — in Omaha or St. Louis or Abilene. It must have been partly the child. Perhaps men have a horror of their barrenness, a desire to perpetuate and extend their identity, a desire which if frustrated becomes violent. Zoologists tell us that the males of a species often fight to insure that the most aggressive and durable genes will be transmitted to progeny. The female merely waits, provocative, at the edge of the field of battle; she only need exercise her blind urge to turn her tail to the victor. Her place in history is already assured. The male can plant his seed, shape his race after his own image only by conquest, and in most species he is put to the test of battle each season.

Among many ungulates, walrus, and some primates, the defeated males become mournful exiles. Some have grown too old, and in one short, bloody encounter have lost whole harems. Once whipped, the stud cannot approach his former loving mates, who ignore him or even slash at him in contempt. Sometimes they do not live long after their loss of power; sometimes they collect in a spiritless fraternity and graze out their days on poor and stony ground. Give them an intense consciousness of their lot, an ability to conceive their own desolate future, and perhaps you have the formula for mad lust and destruction, herds of Nazi mustangs thundering through the streets of Reno, frothing to violate and kill. But I guess I would have such imaginary Hun-hordes start with the nuclear testing stations, or the Navy over there.

"But it was a better world then than it is now," Nona goes on without me. "These poisons they're putting in the ground. These wastes. Why that stuff just doesn't go away you know. Terrible. But our worst problem is the refugees."

I look inquiring.

"Yes, hell, where are we going to put them? Thousands and thousands coming in from El Salvador. We haven't got the room. And those Cubans. They were just crooks. What are we going to do with them?"

I don't know.

"People don't know what's going to happen any more. A fella come around here a few years back, wanted to look at a mine I have a little interest in. Wanted a shelter, a storehouse with food and

That little bit of a ranch lady back there is worth six of them. She lost five, died inside five times, and was driven to kill nobody, but to run more sheep and more cattle on more land.

water and guns underground. Big old fat pious nigger he was. Had lots of money. Why I told him he was crazy. What's the point of living if everybody else is gone, I said to him. That's damn fool craziness."

I agree. We talk over a few other world affairs, then get back to her life. I ask if she was ever lonesome during those 20 years spent running cattle on 1700 acres of hard ground.

"Oh no. If you got a ranch you got no time to be lonesome."

It occurs to me all at once that I have not asked about children, but she has seen where I am headed before I do.

"I lost five children, I did. Never had any children." She bites her lip when she smiles this time.

"Your children? You had —"

"I didn't have 'em. I carried 'em. Four, five months usually. Couldn't keep them. Not enough water in my womb, I think. Something." She is biting hard on her lip now, and there is a just perceptible shake in her voice.

I fumble out a story about my grandmother, who had nine, she always said, although two only lived for a few hours. Those two she always counted and you could tell she cared about them. It is neither the right nor the wrong thing to offer. I stare at the clippings to keep from looking at her, and after awhile one of us thinks of something to say and we go on.

Another tap at the door, and I let in a little man with straight brown hair, freckles, and buck teeth.

"This is my boyfriend, comes to see me every day almost."

"Hiya Nona," he says and takes a seat. "What's your name?"

"Will."

"Mine's Rick."

"He's lived in every state in the union except Alaska and Hawaii," Nona volunteers.

"My dad's a millwright."

"How old are you?"

"Eight."

"Every state?"

"Except Hawaii and Alaska," Nona reminds me.

"Yeah, we was in Arizona last year. I hope we go back there. Where do you live?"

"California."

He looks noncommital.

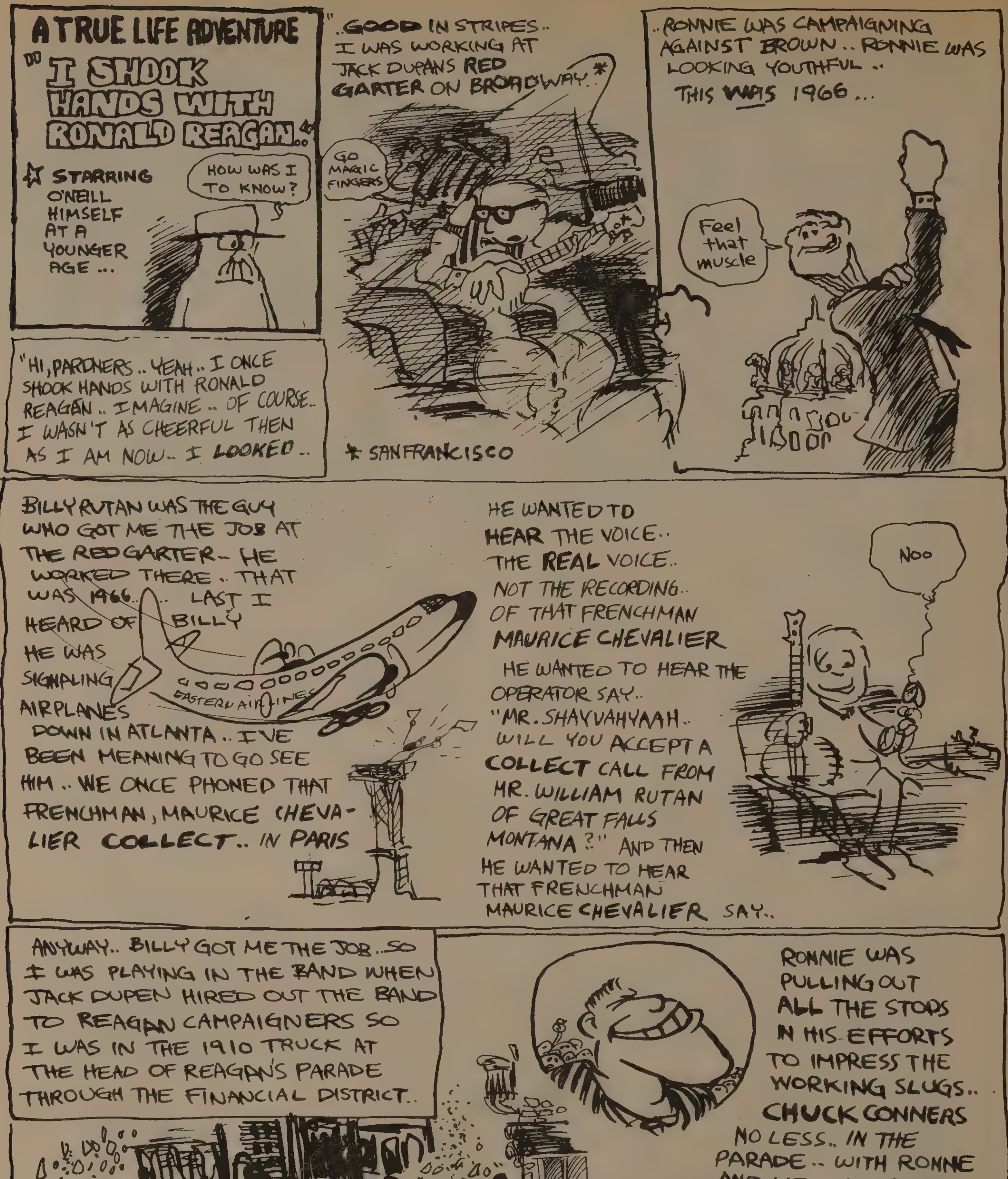
I see the landscape darkening outside, and begin my thankyous, preparing to leave. Then I remember the oranges, and trot out to the Volvo and get half a dozen for her. When she tells me to come back, she means it, though neither of us believes it will happen. I drive away, leaving this 90-year-old and her boyfriend of eight to their own rare and special romance.

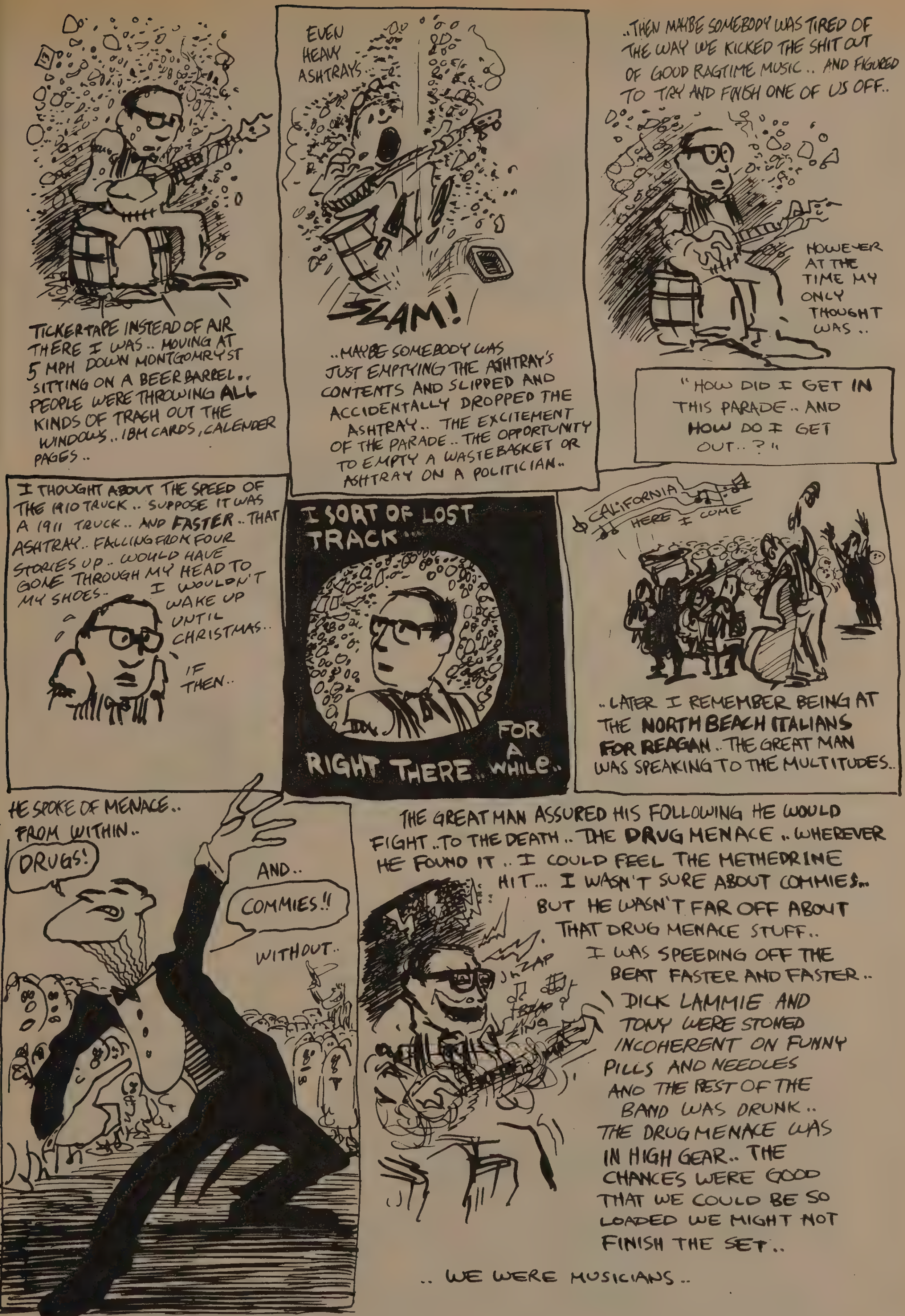
When I pass Midas the western sky is the color of stainless steel and I need the headlights. The rabbits are suddenly everywhere. These are big, gray Western Jacks with ears and tails tipped in black. Soon I am swerving, skidding, braking, trying to avoid them. The spears of light make them crazy and stupid; they freeze or run the wrong way. Once I counted four at once weaving figure eights in front of me. Inevitably, with a curse, I hit one. Then another.

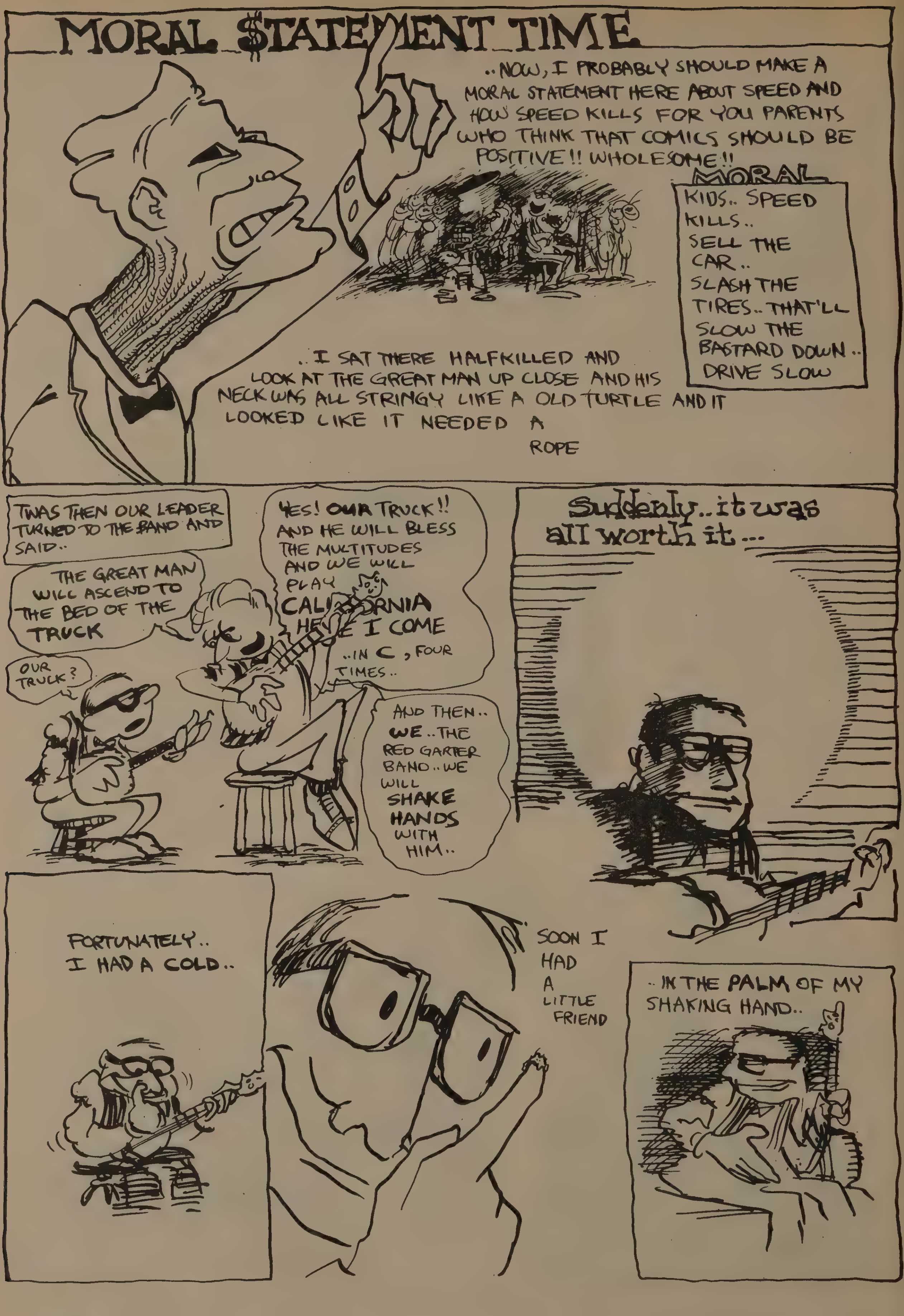
Dodging this way, I think of the beautiful behind only intermittently, a little wearily. The next-to-last cigarette in the pack tastes dry and bitter, and I am finally feeling the mileage. I am also feeling ashamed. The legend of Great Uncle Jim and the Woman Behind It All. That little bit of a ranch lady back there is worth six of them. She lost five, died inside five times, and was driven to kill nobody, but to run more sheep and more cattle on more land.

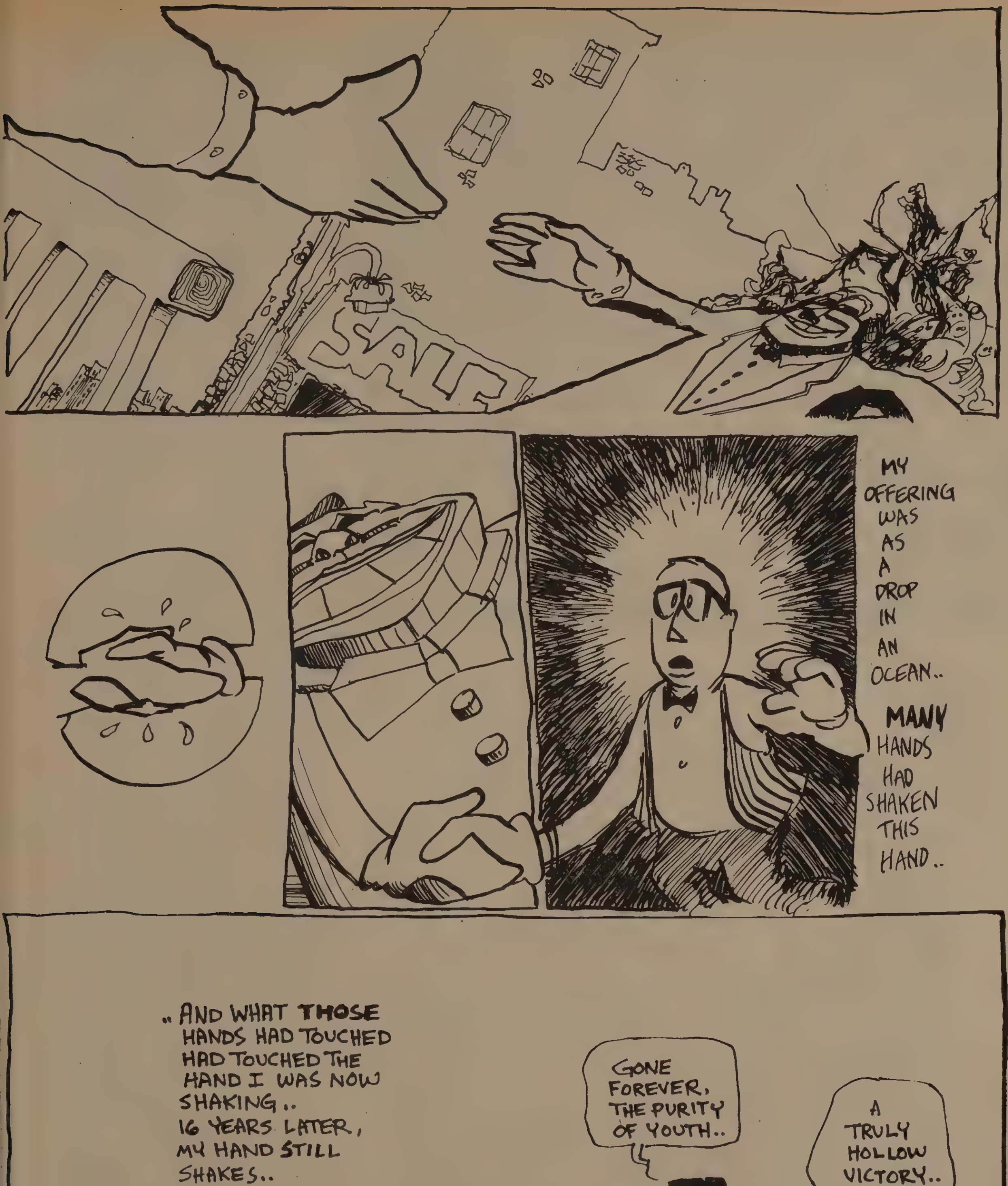
Nature, she would say. Maybe that's it. When it comes down to it they are stronger. They don't need us, except for seed, and it drives us crazy. Our nature to be crazy. Or are there three kinds, the Woman Behind It All and the Woman Left Behind and the Woman Above It All. And all three of them drive us crazy, crazy as these rabbits, Jesus hundreds of them, now I have hit four. They take the children or they lose the children, and we go wild. We drive the jets and set off the bombs and grub for the gold and kill each other. Or ourselves.

I hit the fifth rabbit and there is nothing but a little jerk at the corner of my mouth. Because of the sound. The terrible sound. ■


A TRUE LIFE ADVENTURE
"I SHOOK HANDS WITH RONALD REAGAN.."
STARRING O'NEILL HIMSELF AT A YOUNGER AGE ...
HOW WAS I TO KNOW?
"HI, PARDNERS .. YEAH .. I ONCE SHOOK HANDS WITH RONALD REAGAN .. IMAGINE .. OF COURSE.. I WASN'T AS CHEERFUL THEN AS I AM NOW.. I LOOKED ..
..GOOD IN STRIPES.. I WAS WORKING AT JACK DUPAN'S RED GARTER ON BROADWAY.*
GO MAGIC FINGERS
* SAN FRANCISCO
..RONNIE WAS CAMPAIGNING AGAINST BROWN .. RONNIE WAS LOOKING YOUTHFUL .. THIS WAS 1966 ...
Feel that muscle
BILLY RUTAN WAS THE GUY WHO GOT ME THE JOB AT THE RED GARTER.. HE WORKED THERE .. THAT WAS 1966.. LAST I HEARD OF BILLY HE WAS SIGNALING AIRPLANES DOWN IN ATLANTA .. I'VE BEEN MEANING TO GO SEE HIM .. WE ONCE PHONED THAT FRENCHMAN, MAURICE CHEVALIER COLLECT .. IN PARIS
EASTERN AIRLINES
HE WANTED TO HEAR THE VOICE.. THE REAL VOICE.. NOT THE RECORDING.. OF THAT FRENCHMAN MAURICE CHEVALIER HE WANTED TO HEAR THE OPERATOR SAY.. "MR. SHAYVAHYAAH.. WILL YOU ACCEPT A COLLECT CALL FROM MR. WILLIAM RUTAN OF GREAT FALLS MONTANA?" AND THEN HE WANTED TO HEAR THAT FRENCHMAN MAURICE CHEVALIER SAY..
Noo
ANYWAY.. BILLY GOT ME THE JOB.. SO I WAS PLAYING IN THE BAND WHEN JACK DUPEN HIRED OUT THE BAND TO REAGAN CAMPAIGNERS SO I WAS IN THE 1910 TRUCK AT THE HEAD OF REAGAN'S PARADE THROUGH THE FINANCIAL DISTRICT.
RONNIE WAS PULLING OUT ALL THE STOPS IN HIS EFFORTS TO IMPRESS THE WORKING SLUGS.. CHUCK CONNERS NO LESS.. IN THE PARADE.. WITH RONNIE AND ME.. CONFETTI FALLING .. THICK .. WE WERE MOVING THROUGH THE CROWD SLOW.. RONNIE .. THE RIFLEMAN.. AND ME.. I KEPT THINKING.. "DOES RONNIE KNOW I'M IN HIS PARADE..?"


TICKERTAPE INSTEAD OF AIR THERE I WAS.. MOVING AT 5 MPH DOWN MONTGOMRY ST SITTING ON A BEER BARREL.. PEOPLE WERE THROWING ALL KINDS OF TRASH OUT THE WINDOWS.. IBM CARDS, CALENDER PAGES..
EVEN HEAVY ASHTRAYS
SLAM!
..MAYBE SOMEBODY WAS JUST EMPTYING THE ASHTRAY'S CONTENTS AND SLIPPED AND ACCIDENTALLY DROPPED THE ASHTRAY.. THE EXCITEMENT OF THE PARADE.. THE OPPORTUNITY TO EMPTY A WASTEBASKET OR ASHTRAY ON A POLITICIAN..
..THEN MAYBE SOMEBODY WAS TIRED OF THE WAY WE KICKED THE SHIT OUT OF GOOD RAGTIME MUSIC.. AND FIGURED TO TRY AND FINISH ONE OF US OFF..
HOWEVER AT THE TIME MY ONLY THOUGHT WAS..
"HOW DID I GET IN THIS PARADE.. AND HOW DO I GET OUT..?"
I THOUGHT ABOUT THE SPEED OF THE 1910 TRUCK.. SUPPOSE IT WAS A 1911 TRUCK.. AND FASTER.. THAT ASHTRAY.. FALLING FROM FOUR STORIES UP.. WOULD HAVE GONE THROUGH MY HEAD TO MY SHOES.. I WOULDN'T WAKE UP UNTIL CHRISTMAS..
IF THEN..
I SORT OF LOST TRACK..
RIGHT THERE.. FOR A WHILE..
CALIFORNIA HERE I COME
..LATER I REMEMBER BEING AT THE NORTH BEACH ITALIANS FOR REAGAN.. THE GREAT MAN WAS SPEAKING TO THE MULTITUDES..
HE SPOKE OF MENACE.. FROM WITHIN..
DRUGS!
AND..
COMMIES!!
WITHOUT..
THE GREAT MAN ASSURED HIS FOLLOWING HE WOULD FIGHT..TO THE DEATH.. THE DRUG MENACE.. WHEREVER HE FOUND IT.. I COULD FEEL THE METHEDRINE HIT... I WASN'T SURE ABOUT COMMIES.. BUT HE WASN'T FAR OFF ABOUT THAT DRUG MENACE STUFF.. I WAS SPEEDING OFF THE BEAT FASTER AND FASTER.. DICK LAMMIE AND TONY WERE STONED INCOHERENT ON FUNNY PILLS AND NEEDLES AND THE REST OF THE BAND WAS DRUNK.. THE DRUG MENACE WAS IN HIGH GEAR.. THE CHANCES WERE GOOD THAT WE COULD BE SO LOADED WE MIGHT NOT FINISH THE SET..
ZAP
..WE WERE MUSICIANS..


MORAL $TATEMENT TIME
..NOW, I PROBABLY SHOULD MAKE A MORAL STATEMENT HERE ABOUT SPEED AND HOW SPEED KILLS FOR YOU PARENTS WHO THINK THAT COMICS SHOULD BE POSITIVE!! WHOLESOME!!
MORAL
KIDS.. SPEED KILLS.. SELL THE CAR.. SLASH THE TIRES.. THAT'LL SLOW THE BASTARD DOWN.. DRIVE SLOW
..I SAT THERE HALFKILLED AND LOOK AT THE GREAT MAN UP CLOSE AND HIS NECK WAS ALL STRINGY LIKE A OLD TURTLE AND IT LOOKED LIKE IT NEEDED A ROPE
TWAS THEN OUR LEADER TURNED TO THE BAND AND SAID..
THE GREAT MAN WILL ASCEND TO THE BED OF THE TRUCK
OUR TRUCK?
YES! OUR TRUCK!! AND HE WILL BLESS THE MULTITUDES AND WE WILL PLAY CALIFORNIA HERE I COME ..IN C, FOUR TIMES..
AND THEN.. WE.. THE RED GARTER BAND.. WE WILL SHAKE HANDS WITH HIM..
Suddenly..it was all worth it...
FORTUNATELY.. I HAD A COLD..
SOON I HAD A LITTLE FRIEND
..IN THE PALM OF MY SHAKING HAND..


SALE
MY OFFERING WAS AS A DROP IN AN OCEAN..
MANY HANDS HAD SHAKEN THIS HAND..
.. AND WHAT **THOSE** HANDS HAD TOUCHED HAD TOUCHED THE HAND I WAS NOW SHAKING.. 16 YEARS LATER, MY HAND STILL SHAKES..
GONE FOREVER, THE PURITY OF YOUTH..
A TRULY HOLLOW VICTORY..
ONEILL

THE PURE GOLD BABY

XEROX ILLUSTRATION BY KATHLEEN O'NEILL

by Charles Pappas

LIFE WITH MORLOCK has not been that much of a nightmare, nor has it been anything like the nocturnal terrors a young boy might conjure up lying alone and awake in bed at night. Rather, it has turned out to be nothing less than an excursion into nonordinary reality, a Castaneda-type journey to pandemonium, where neither altruism nor evil resides, only the relentless, bland foulness our race on occasion offers up. Life with Morlock is not susceptible to metaphor. "Hellish," "demonlike," "possessed," are descriptions which stand only as vague exaggerations of an earthly, and not ethereal, happening.

Morlock is 14 years old and short for his age – about 5'3". In his unique way he is a battered child, incredibly shaken by psychological horrors which rival the most repulsive dragons of our cultural memory; we hear things that go bump in the night, but Morlock manages to be both the thing and its victim.

Morlock has a severe "emotional disturbance," – an umbrellalike figure of speech whose shadow includes: compulsive violence, hypotonia (the lack of bodily tension), massive hyperactivity, mental retardation, and a dash of psychosis. To the unaided eye, though, Morlock is uncannily deceptive. Although cute in the way many mammals see their young, he actually is more like one of the dead souls in Plato's cave, unaware of the truth and wholly unconcerned about it. Or he may be likened to a C.S. Lewis villain, an incarnation of the purest evil. Morlock is a symbol, part real and part magical. After all, how could this child do what he does without a brownie or poltergeist to prod him along? Despite this, without the proper care (and not the less important aspect of love), Morlock will stay isolated, an involuntary/voluntary inmate of a special and disorganized universe. He is the captain of an invisible army that he is tragically compelled to lead into the abyss.

I am 25 years old. I grew up too late to ride herd on the sixties or to vanish to Afghanistan and not feel silly. Though I have trekked through America, Europe, and North Africa and sampled their various (and dubious) pleasures, I have never really been threatened or able to say, like Nietzsche, that those things which have not killed me have made me stronger. I have never felt, like Dostoevski before the firing squad, death, either physically or existentially. As a habit, I read the world wrong and then pout, whining that it has deceived me.

In late summer of 1977, I began work at an institution specializing in certain types of disturbed children. Suckled on televised pap, I started out full of sentimental notions, the greatest (and most pathetic) of which was that intention and effort equal result. I could not have known what child I was to be assigned to. –*Charles Pappas*

Morlock vomits at will, as often as 20 to 25 times per day. Not so long ago he perfected this talent to do combat more effectively with those he dislikes. I have held him by his arms, tightly, as he giggled and screamed, rocking his head right and left. Minor waterfalls of vomit were dumped on my arms; somehow, much of the waste was undigested food, and it had a stench like that of a dead cat. Once, when I was leaning over Morlock to pull up his pants after he urinated on me (he wills erections when on the toilet so as to do such things), Morlock's hand shot up to my head, clutched my hair, and brought me to my knees with a rather savage jerk. I looked up, and as I did a stream of vomit splattered my head and shoulders. Another time, Morlock snatched a fece from his anus and pushed it into my mouth. Unlike George Foreman, Morlock does not punch himself out in the early rounds. From the beginning he has thrown feces at me while I watched him twirl-dance in the shower; he has assaulted countless others, often tearing out their hair; he has destroyed a hand-built recorder and has even torn off someone's necklace and tried to swallow it. The kid is a kamikaze with one difference – he will have no swan song.

When first at St. Joan's, Morlock "broke" three workers in one day, one of whom had run bombing raids over North Vietnam. But each victory is pyrrhic, for as Morlock's notoriety grows he becomes more and more counted upon to commit horrors. His lips transform themselves into a frosty blue as he demonstrates his peeved disrelish for those who do not turn his head. Heavy breathing, the penchant of late night obscene phone callers, is also reliably employed by Morlock to indicate that he is unhappy and ready to let the shit hit the fan, literally. He stomps on the patience and humanity of every worker he has yet been confronted with (the total kill for the first month was seven workers). He has, in the span of five hours, thrown up ten times, defecated in his pants five times, urinated on the floor twice, and launched at least a dozen attacks on myself and others. He can throw down his pants, vomit and urinate simultaneously, then peek up to catch my reaction as he drenches the floor. To assault a human being with such an excretion derby is to mimic on a small scale the systematic dehumanization characteristic of the concentration camp. Few of us could soar over and above an attack centered on our nearly instinctual disgust with our waste products. When covered even partially by dung or urine, we begin to suspect that not only do our clothes and skin reek but our souls do as well. We become the instruments of our downfall.

In the beginning, it is not in the least humorous: feces smeared upon oneself by a troll with bullet-quick hands could rush even the leatheriest into deserved breakdowns. Now, however, after dozens of showdowns with the scatological kid, I simply do not care any longer. I have had to throw away my haughty self-regard. It was time to be a clown; to deal with a psychotic, you have got to act like one. The visceral thrill of observing his fingertips dance lightly over his mouth and then spring forward, followed, like a fox by hounds, by a stream of multicolored ruminations, is gone. I can look Morlock in the eye and think to myself, "Is this all there is?" I have accustomed myself to being thrown up upon, so that he might realize my pride is larger and vaster than his reptilean charm. Satan fell for the best of excuses.

In this particular (and most peculiar) case, I have not been handed a King Lear to mince words with or even to cure with lithium carbonate. Furthermore (and to my consternation), I do not even have a Marat to bicker with about morality and terror. Morlock has a limited vocabulary (by his own decision?). It consists of crude, infantile outbursts: "car ride," "ride in car," "want eat," "more food," "you come here," "hold on," and his newest, thanks to watching an episode of **All in the Family**: "Dingbat."

An anthropoid armed with language and all the subtlety and nuance that go with it, I could handle. I am verbal. I, unlike most other animals, can use and create extrasomatic information. I can be ambiguous and I can displace. I can transmit a description of a personal heaven or hell to one unfamiliar with my being. Morlock, on the other hand, possesses little actual language, but he does repeat, perhaps two, three, or four hundred times a day, a morbidly alluring "You're gonna die." Even when I reward the little tyke unnecessarily, he will often shake like an epileptic, curl his hands as though kneading bread, slap them up against his mouth, grin at me with unblinking eyes, and once more propose "You're gonna die, die, die."

I am stuck with what I sometimes think is a fallen angel, or an extension of Linda Blair's archetypal beastie from **The Exorcist**. How is it possible to convey the apprehension one experiences as he watches a 65-pound child wrestle three adults to the floor to avoid his daily dose of soporifics? Screaming and struggling, we do our best to gently pin him down, though at moments we feel as if he were a gymnast exerting his tremendous strength. At such times we are, I confess, evil, or so I feel.

At bedtime, Morlock is sometimes remarkably passive, so idle I suspect a trap. If Morlock is troubled before he goes to sleep, he will do his best to ram his head through the bedroom wall. When he tries that, it is not uncommon for doors adjacent to his room to rattle, affected by his staccato-rhythm skull-banging; at this point he does not so much resemble a small boy as he does a chimera, half boy, half woodpecker.

There is an apocryphal story traveling the rounds at St. Joan's, stating that Morlock has been heard howling in the presence of a full moon. While this is debatable (he does utter sounds that are similar to those of an animal), it is irrelevant. He has been stripped of his humanity by this Grimm-like fiction, and in place of it given 200 milligrams of Mellaril four times a day.

Rejected by his parents (they have rarely seen him in ten years of institutionalization), he has no home other than St. Joan's, where abuse is king. Not the abuse of blackened eyes or distended stomachs, but the type in which hope is as often as not falsely offered. Morlock wants to be loved, and as such will adopt a dualistic stance, believing that only good will sally forth to match his evil. This is not philosophical ruminating, it is the truth. Morlock denies life because he is afraid of death. He sees and hears things we do not. Inanimate objects are anything but that to him; life and death lurk in everything as if a spell had been cast upon them.

In another time, in another land, Morlock might have been a trickster, a member of the tribe so perverse that others would think him cryptic, so irrational that he must be esoteric. Morlock will probably die soon, perhaps before his 25th birthday. He has been awake a long time, and still does not realize he was born with a shattered heart: Morlock is abnormal not only because he savages his workers or soils his clothes without cessation; he is abnormal because he does not love. ■

THE RISING SUN NEIGHBORHOOD NEWSLETTER

KATHLEEN O'NEILL

by Anne Herbert

What's your favorite edge?

Not bitterness.

The shore side of the ragged edge.

Dawn.

The wet part of the beach.

The sides of a pool table.

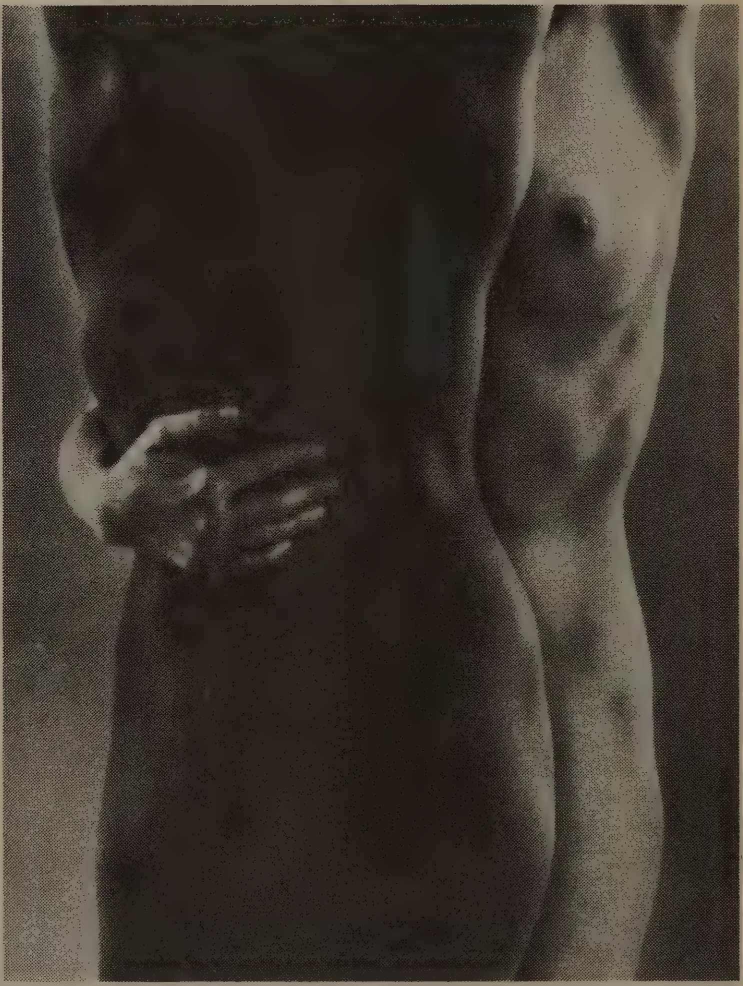
The shape around my hands.

The top of the glass in my mouth.

This one.

Where I stop and you begin.

–Nancy, Anne N.,
a guy at the bar, Kathy, j.d.,
Anne H., another guy at the bar,
Carol, Kathleen



TWO FORMS, 1963 ©BY RUTH BERNHARD

The Rising Sun Neighborhood Newsletter started out as a Xerox telling my friends about each other, then filled the lower right hand corner of The Next Whole Earth Catalog, and is now becoming a book, to be published later this year by Random House. (It's also still a Xerox for friends.) I started out as a preacher's and teacher's kid in Ohio, later taught college speech, then did assistant editing, production managing, and guest editing (issue 28) at the CoEvolution Quarterly. I'm now working full time making the Rising Sun book. If you'd like to be sent ordering information for the book when it's done, send me a card with your name and address on it. *–Anne Herbert*

COMPASSION IS THE MISSING WORD

Compassion means feeling with and not feeling mildly.

They were talking in the cafe and suddenly he sang in full operatic tenor, "I like you too." She smiled a real smile and kept talking. I liked them both a lot.

He goes around with a dead Bic writing poems in the thin tin bottoms of McDonald's ashtrays – GENTLY DOES IT and LET LOVE LIVE and WAIT and YOUR HEART IS AS STRONG AS A TREE.

You lived in another country and what surprised you good and what surprised you bad?

What happened when it rained?

We had a party in a house instead of the beach. *–Lorrie*

I remembered I was a bubble of ocean walking in the desert. *–Kathleen*

"I wonder why I hadn't noticed that before? Self-absorbed, I guess. Asleep in the deep."

Sitting in California, we don't know where we are unless we can believe that China is the West and Europe is the Far East.

Ramble on.
Find the Queen of all our Dreams.
–graffiti on the dumpster at the Petaluma Greyhound depot

SUSPENSION ©f. STOP FITZGERALD 1980

"This cold makes me realize how little I actually think. Because I can't think at all now, but I can still do almost everything I usually do. So I must be running on automatic most of the time." *–Stewart*

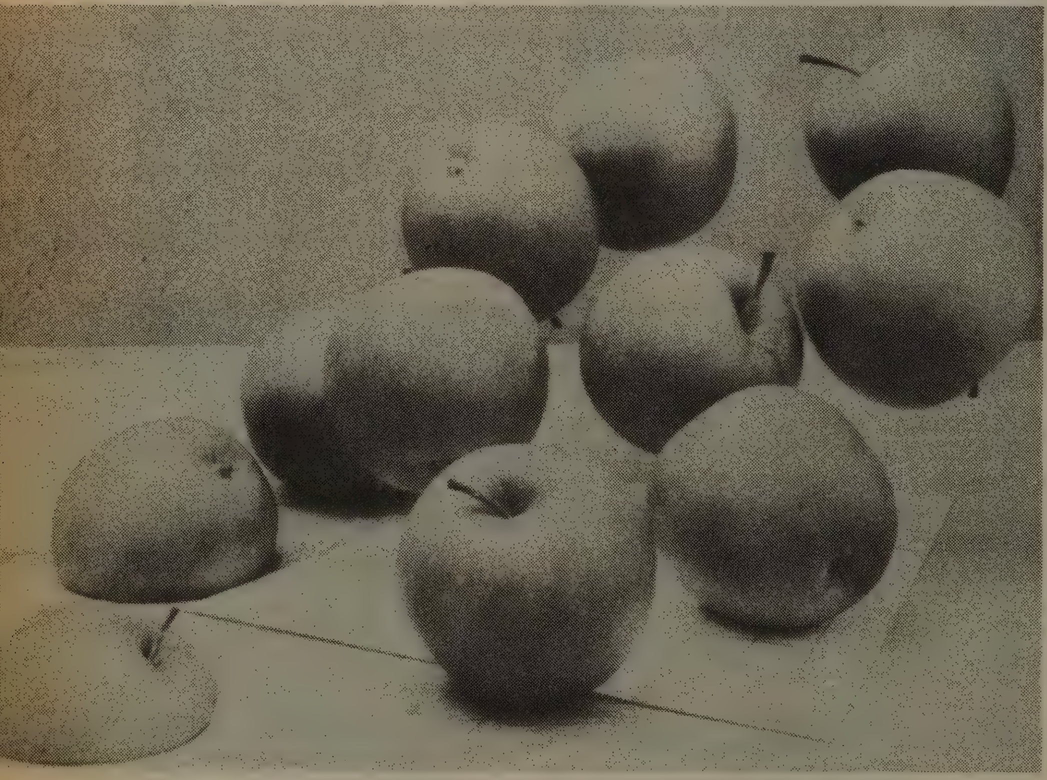
---

albert einstein's wife took him to a haberdashery in princeton, new jersey. albert allowed his body to be fitted with a jacket, then took the pants into the changing room. mrs. einstein (olga, or hinda, or tootsy) got worried after a few minutes and called to albert to see if he was having any trouble with the zipper. no answer, so she and the clerk jimmied the lock, opened the door, and found albert sitting and writing formulae on the waistband and pockets of his new pants. –jd

norbert weiner, the father of cybernetics, was a little absentminded. he found his way to his office by running his hand along the wall as he walked, counting the doorways he passed. when his wife saved enough of his scientist's paycheck, she bought them a new house in the suburbs (before that was an unmentionable place to live). figuring that norbert wouldn't remember that they were moving, she left their granddaughter at the old house to remind him. sure enough, after work, norbert went home to the old house, and found his granddaughter sitting on the front porch. he asked her, "what are you doing here, little girl?" –jd

They really have mystery tours in England. You sign up and get on a bus somewhere and you don't know where it's going. (Yep, all this is just a mystery tour from your previous incarnation.)

–information from Kathleen



APPLES IN FLIGHT ©BY VOLKER SEDING

What is the question that this picture is the answer to?

Do apples take a running leap before they fly, or do they just leap off the ground?
–Lorrie

Kathleen saw buildings in
the clouds on the farm
since people in the city
see sheep.

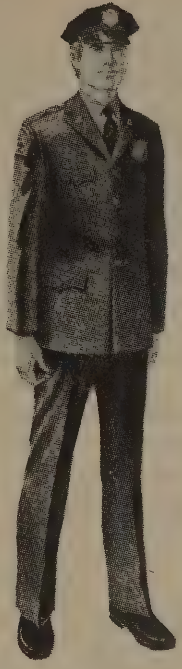
Clouds are ocean emissaries
to the land, returning one
day with stories for the
whales to sing.
–Kathleen

It's hard to know.
It's difficult to know.
It's impossible to know.
Who knows?
–mantra

"She's a different kind of woman to be living in that town. She gets them to do Shakespeare. This summer she did a reggae **Tempest** – Caliban was a Rasta. Our friend Keith played Caliban. He bit off the head of a raw fish every night. It's great to see all those car mechanics and bank tellers saying Shakespeare in the middle of the night." *–jd*

"When you're in a place where everyone is looking at what to buy, you look at the people. You've seen those cardboard boxes before, you only think the people are cardboard because you never looked." *–Amanda*

Looking at the faces on the street she said, "Something must be done. The people are in pain."



STAY WHERE YOU ARE DON'T DO ANYTHING

Whatever happens, don't do anything until you hear from the authorities; your safety cannot be guaranteed if you take it upon yourself to act.

Stay in your homes, cars or shopping centers. If you stay at home, watch television or listen to loud music. During the day, remember that there is no safer place for you than on the job. If you are too young to work, go to school. For your own good, do as you are told.

The authorities remind you: The streets of your community are not safe, so if you must leave your home, to seek entertainment or diversion, drive, do not walk, to your destination. If you find yourself unexpectedly on the street on foot, speak to no one.

Remember that maintenance of order rests solely upon your willingness to follow instructions.

–from **Modern Citizen** *magazine*

What's in a Billion?

A billion dollars is a very elusive concept. Look at it this way. $$$
Suppose that every day, seven days a week, you got a thousand $$$
dollars. In a year, you'd have roughly a third of a million and in $$
roughly three years, a million. Since a billion is a thousand million, $$$
it would take you three thousand years to earn a billion dollars at a $$
rate of a thousand a day. (We're assuming no interest and no taxes.) $$$
Now, if at the time of Christ someone started laying aside a thousand $$$
dollars a day to your account, now, two thousand years later, you'd $$$
still be shy almost one third of the amount. Reflect a moment on $$$
this, and then realize that the Rockefeller family is worth between $$$
two and twelve billion dollars, and that there are perhaps up to a $$
dozen more families in or near the billion dollar mark. Then ask $$
yourself how could they possibly have *earned* that money in any $$
realistic sense of *earn*. And if they didn't earn it, who did, and how $$
did they come to get hold of it? $$$
–found unsigned on a bulletin board by $$
a friend of a friend of Bud Kenworthy $$

What's a story you know about the (or a) revolution? or a television?

When my cat first saw a TV in a hotel room in Toronto, he watched for a couple of minutes, walked over, tried to touch the moving figures, walked around to the back to see where they went. He realized in four minutes that he could not affect the movement and never looked at it again. *–Kathleen*

I knew a friend in Albany, New York, in the '60s who wrote a play about a group of depressed, shut off draft evaders and friends living in isolation in Canada. Then one day they come back to the U.S. and find out that the revolution had happened. "Oh yeah," everyone says, "we did that, sure." They feel like those WWII Japanese soldiers living on . . . The author of the play then left Albany, New York, to live in the country in a small community of people. *–Art*

"Ye know not the day nor the hour," Jesus said, and Amanda said the revolution won't be what we expect (or else it won't be the revolution but another wall we transfer from our heads to the surface of the Earth.) We must watch for it always out of the corners of our eyes, help it, stop and breathe with it and not run away startled or stomp it out scared.

I was reading about the '60s communes – the well-organized, disciplined ones that lasted and the free, the-land-belongs-to-everyone ones that failed, and I went to sleep. All the characters in **Pogo** were doing maypole dances and jigs and reels on the morning sunlit lawn of all the best oceanfront, best lakeside, best hillview properties in the world combined. Anyone could play there if they found the secret way in. Churchy La Femme had found the way for all his friends and they were twirling faster and faster against the clear green and blue of the Sunday funnies. Churchy was beginning to suspect it was a dream but I woke up before he did.

Stupid guesses

Gotta keep making those stupid guesses.

Gotta make places for stupid guesses.

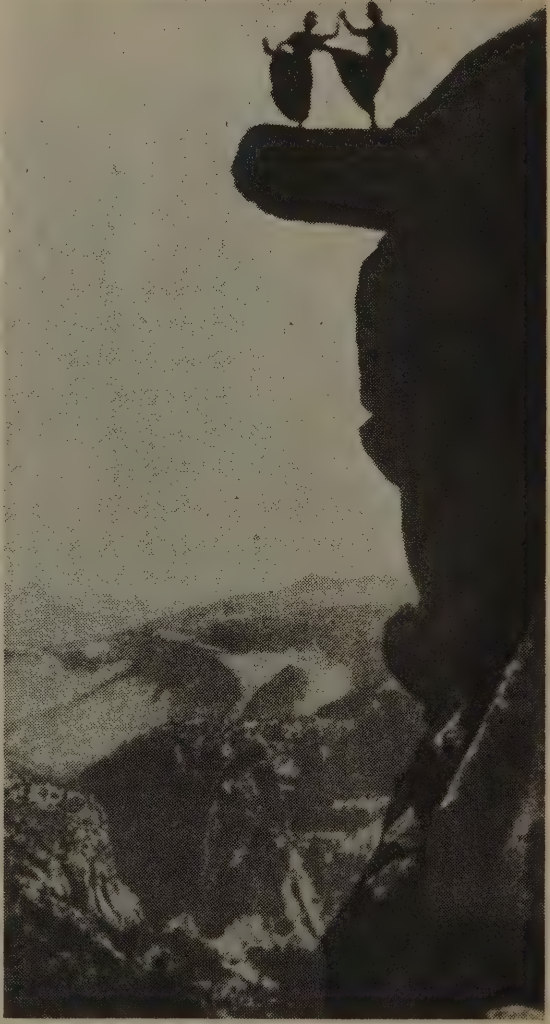
Gotta have stupid guess sessions weekly.

Smart means taking into account, cleverly, what is already known, and putting it together so it makes something we knew we wanted. Stupid does not mean we tried it and it didn't work. Stupid means it's so different than what we were taught to expect that we know it won't work so shut yourself up or get yourself laughed at. Much of what's deeply unlikely, what's bizarrely not of the world, probably wouldn't work, but with smartness giving us giant people-killing machines and faster and faster trips to places more and more the same, we've got to start sifting through all our secret stupidity and silly touching dreams to look not for gold but some precious metal we've not seen before.

I wrote about stupid guesses in the morning and that afternoon I talked to some people from **Madness Network News** about the many badnesses of being locked up and drugged and shocked because of a label someone gives you. I asked David Oaks what it should be like ideally. He said he thought of places where people could go to take care of each other, where people wouldn't be divided into patients and professionals, but all would be there to help each other. And, he said, "I think we need to accept human vision and the different strange things people think. We need all those thoughts. We need to act out our dreams. But if you act out your dreams, they lock you up and if you build bombs they don't lock you up." He thought and grinned. "I mean if you build *really big* bombs."

17 People I'd Like to Be

1. Dolphin
2. Sailor on a clipper ship sitting on the crow's nest watching the sunset
3. Emma Goldman
4. Mrs. Hertzel in her garden
5. The Black Stallion and the Boy
6. Charles Dickens on a good day
7. Gleaming fossil
8. Relief map of Africa
9. Bears
10. Great first grade teacher
11. Yogi Berra talking a poem
12. Fourteen candles
13. Five gold rings
14. Giraffe
15. Dome (green)
16. Wart the kid in **The Sword in the Stone**
17. Mount St. Helens



GEORGE FISKE

I was walking down the street in downtown San Francisco, thinking strange thoughts, and thinking how half of what I, and I bet most people, think would get us locked up if we said it out loud like we meant it in the wrong room. So I tried to figure out, would it be possible to go through a whole day thinking only regular thoughts, only stuff your culture accepts as rational? How would you do that? Would I go over and carefully study the display in Pic-a-Dilly's window and decide which dilly to pick? Would I say to myself, "The sidewalk certainly is made of concrete. Sky's still blue. Many people and cars moving around today."

The only thing that seemed like it might fill the bill of regular thought and also engage the mind for a while would be reading the newspaper. There's a lot of weird shit in there, but it seems like everyone thinks it's rational to read it and think about it and talk about it. Maybe newspapers are our basic mass psychosis. (Notice how the sudden death of someone famous makes it OK for everyone to say the kind of hostile or sad or angry conspiratorial illogical things that usually only weirdos on the street are permitted.) But after I'd finished the newspaper, I don't think I could make it through five minutes without some oddness. Which reminds me of what more than one person who's hung out around mental hospitals has said – the way to keep out of them is to keep your mouth shut.

It's silly to fall for our own hype though. A lot of times when somebody loses it and is openly weird, we let our exterior rational selves judge their interior irrational selves, saying, "I just don't know why she's like that" when if we'd shut up for a minute and remember who we are when our mouth is closed, we'd know perfectly well why – we're like that too.

18. I forgot to say I definitely want to be a body of water. Probably a lake or river. (I'm feeling inland today.)

Consciousness is a bit much, isn't it? Or is it not enough? Do we need more or less – calmer or more stirred up? What *is* it?

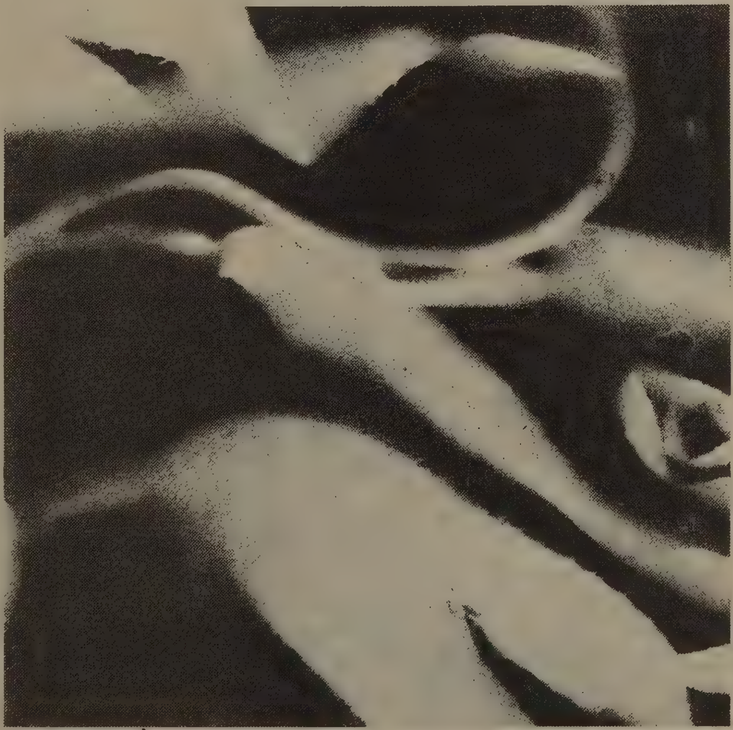
How do you decide what the right response is to being able to decide how to respond?

We were talking about Jim's brother's problems and Kathleen said, "When was he diagnosed?" Jim said, "When he was two or three he was diagnosed as being autistic and later they said he was brain damaged and then learning disabled." Kathleen said, "I have a feeling no one should be diagnosed until they're eighty."

Don told about how during World War II, the Norwegian government knew that the Nazis were going to invade and that Hitler killed retarded people, so the Norwegians took all the retarded people out of institutions and put them into the community. After the war, they couldn't find them. (They told Mary that story when she was in school learning to be a special ed teacher.)

–"Can psychiatrists be rehabilitated?"
–"Maybe you could send them backwards through medical school."
–me and Ben talking

How are we to understand everyday life? What kind of language can we use to describe and analyze and transform it? Everyday life is both the field in which we move, but also the field which moves within us. *–Annie Janowitz in **Tabloid**, Winter 1981*



SUSIE SCHLESINGER

"If you had a whole bunch of laser beams at different angles in a room hooked up to a synthesizer, anyone who danced would be a musician."
–Kathleen

Night scene of the electric star on Mill Mountain

Now my suspicion is that the universe is not only queerer than we suppose but queerer than we can suppose. *–J.B.S. Haldane*

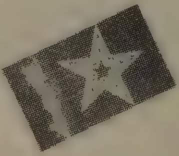
Have you ever fallen into a picture?

Every time I walk out of a movie house I am, mentally, one of the characters. For that reason, my favorite films are those starring Fred Astaire. *–Art*

'Snow is Falling.' A drawing of those words – snow is falling. *–Kathleen*

No, but I'd like to. *–Anne*

Yes. I turned into a picture of "The Lawrence Tree" by Georgia O'Keefe. A friend and I were visiting the exhibit, me high on mescaline wearing my majick shirt with blue clouds and Navajo jewelry. I was dissolving into the blue & umber & midnight green when some real straight matrons behind me started exclaiming that I'd dissolved into the picture. *–Stephanie*



Miss Dickinson was building the sky. She made lasers, planetariums, the planet Vulcan, and many other things unknown in her time and used them to build a beautiful early autumn sky in the attic of her house. She loved the sky of October 6, 1832, very much. She thought the best way to reply to it was to make one herself, the same and different. She didn't get out much. In breaks, she wrote poems.

The sky is a light show. The people who are putting it on increase its complexity as we increase our ability to perceive it complexly. As soon as we figured out that galaxies were galaxies and not big fuzzy stars in our galaxy, they started working on black holes. They made black holes nice and complicated with mazes and trick doors to get themselves time to work on the next thing which is going to be a humdinger.

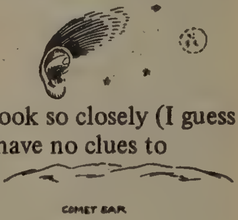
Humdinger is what it will be called because it will both hum and ding into radio telescopes. Scientists will say that only geniuses with Ph.D.s in both physics and math can understand it. Then it will move closer and be visible in regular telescopes and scientists will say only astronomers can understand it. It will move closer and be visible to the naked eye in the night sky as a one man band and a bagpiper accompanying fourteen clown acrobats doing their impression of the Sistine Chapel, explained by the voice of God as Gracie Allen and everyone will understand it except scientists.

★

"The untidiness of the stars makes my head ache."
*–character in Werner Herzog's **Heart of Glass***

"When they say 'scattered light showers' I always think they mean 'scattered showers of light.' " *–Art*

What do you dream of planets and your body?



A place where you have to look so closely (I guess like an infant) because you have no clues to what's there.

Loving your body enough to be able to leave it. *–Kathleen*

"I've ridden the rings of Saturn. They're birds. They all fly in the same direction and they never stop flying. They have to keep flying to keep Saturn turning. If they ever stopped, the planet would stop and time would stop. The birds are bigger than eagles so they're easy to ride. They're bigger than houses." *–Delta*

For my own part, I declare that I know nothing whatever about it; but to look at the stars always makes me dream as simply as I dream over the black dots of a map representing towns and villages. Why, I ask myself, should the shining dots of the sky not be as accessible as the black dots on the map of France? If we take the train to get to Tarascon or Rouen, we take death to reach a star. One thing undoubtedly true in this reasoning is this: That while we are alive we cannot get to a star, anymore than when we are dead we can take the train. So it seems to me possible that cholera, gravel, phthisis, and cancer are the celestial means of locomotion, just as steamboats, omnibuses, and railways are the terrestial means. To die quietly of old age would be to go there on foot.

—*Vincent van Gogh in Dear Theo*

Kathleen said that sometimes she thinks gravity isn't a physical force but a skill we learned way back sometime — how to stick to the planet.

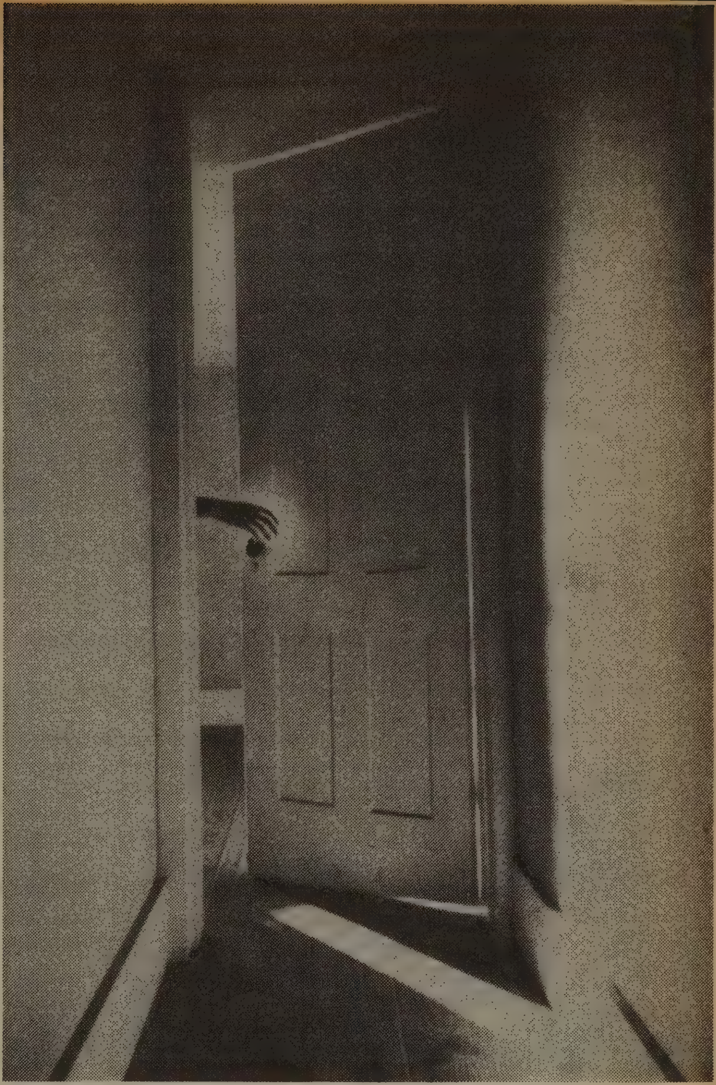
I had a dream that I was running around and around in a circle, leaping up every now and then. I was in the middle of a kid's playground, running on the edge of this concrete cylinder that was a foot and a half high and as wide as a merry-go-round. I was having fun, going a little faster and leaping a little higher each time I ran round. Kathleen was sitting in the center of the circle, intent on making some art things, with that smile she gets when she's doing stuff and other people are having a good time nearby. My leaps keep getting higher and longer until I realize they aren't just leaps — I'm unlearning gravity. As soon as I know that, I unlearn it faster, making bigger and bigger circles round the whole playground, one touch down every few minutes and then none at all and my feet have forgotten how to touch the ground. I decide to try to touch down once to see if I can. The instant my shoe skids on the ground, I forget everything I knew about not sticking and have to walk over to see what Kathleen just finished making. It's blue and shines in my eyes and tells me I'll be able to unlearn gravity again sometime when I want to stay.

★

"The older I get, the more mystical I'm willing to be." —*Ben*

INSTRUCTIONS

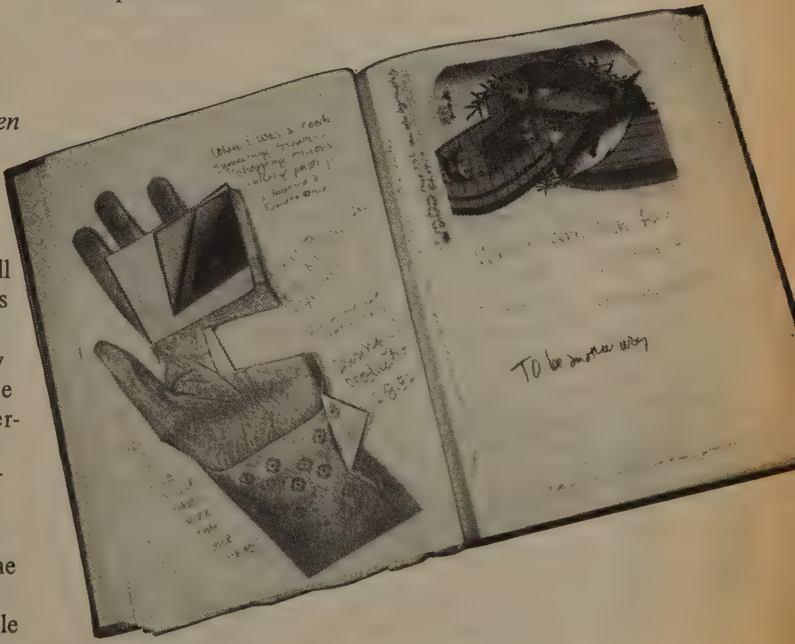
Get a hardbound sketchbook or spiral bound notebook or something else blank that won't fall apart when handled. Write on some of the pages questions you want to know the answers to. (Question askers must be brave and silly.) Draw and paste in the book pictures you like and write questions or answers about them. Do other interesting stuff in the book and leave space around everything for people to make answers and their own questions. Leave the book and a pen on a table at a party, in the john, or any other place where people you're interested in have spare time and free hands. (We can know each other for many years and still not meet many of the people that we are. Ask to be introduced.)



FROM *THE SOMNAMBULIST*, 1970 ©BY RALPH GIBSON

What's your favorite edge?

Between the unexpected question and the unexpected answer.



■

Cotton clothing

These are three cooperative or family-run mail-order cotton clothing suppliers, all beloved by our readers. Cotton Dreams has the largest selection, with many items for children. Good Things Collective started out selling Chinese shoes. Now they also offer "reasonable, durable, well-designed cotton clothing. Their prices for cotton flannel sheets are the lowest I've found," says Marilyn Green. Deva has the smallest selection — they're known for their drawstring pants and shorts — and the lowest prices generally. All three offer good values, 100 percent cotton (or wool) clothing, and warmly efficient service. (Cotton Dreams and Good Things have hard-to-find cotton tights.) —*Art Kleiner*

[Suggested by John Benecki, Jeanne Finan, Marilyn Green, Barbara Heller and Shirley O'Neall]

Cotton Dreams, 999 Laredo Lane, Sebastian, FL 32958. *Catalog free.*

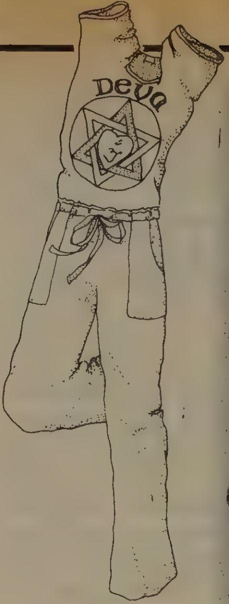
Deva, 303 East Main Street, Burkittsville, MD 21718. *Catalog free.*

Good Things Collective, 52 Main Street, Northampton, MA 01060. *Catalog free.*

•

Lotus Pants $16

We updated our original Deva design to include two roomy front pockets making these cotton drawstring pants ideal for streetwear. They may be worn alone or layered with long johns or tights for truly year-round comfort. They are designed to fit American bodies and lifestyles gracefully. Wear them right from the dryer—you may never buy jeans again! —Deva



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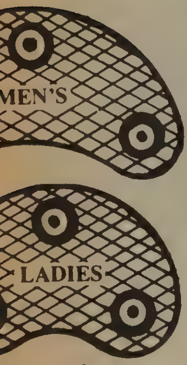
Let your child's body breathe in our soft pure 100% cotton long-sleeve "cotton-wear sets." Contains no chemicals! Made of warm soft cotton knit. Colorfast and pre-shrunk (except white).

Styles: Boys or girls

Colors: Apricot, Blue, Red, Purple, Yellow, Green, White, Pink. $8–$9. —Cotton Dreams

Hale Heel taps



(actual sizes)

My boot heels used to wear down and fall off long before the sole wore out. These silent (polyurethane) taps extend the work life of shoes and boots for a meager cost. —*Scott Parker*

Hale Heel taps
15 pairs of taps for **$3** from:
Hale Heel Company
Department B
Chipman Road
Middlefield, MA 01243

Hebden corduroy

Noticed in the **Catalog** *that you commend some English clothing and wondered whether any of your readers had drawn your attention to the wonderfully durable corduroy clothing made up by Mr. Pickles at the Hebden Cord Company, Hebden Bridge, West Yorkshire; I saw, from a catalog I picked up in America last summer, that L.L. Bean imports Mr Pickles trousers in cord. But he also makes very rugged and hard wearing clothes in tweeds as well, and I'm sure your American readers would find the free catalog of styles that Hebden Cord send out a fascinating microcosm of England, with its illustrations of what the landed gentry wear and clothe their huntsmen and gamekeepers in, too. There are also some less archaic designs and styles of clothes Mr Pickles will make up from your choice of materials. If you are keen on quality and durability — at very reasonable prices — in organic materials like cord and tweed, Hebden is hard to beat.* —*Peter Kiddle*
Totnes, England

Hebden Cord Country Wear
Catalog
free from:
Hebden Cord Company
17-23 Oldgate
Hebden Bridge
West Yorkshire, HX7 6EW
England

•

Hebden Corduroy Trousers £19.50

Our speciality for over 50 years and one of our best-selling garments. Warm and hard-wearing in full weight 100% British cotton corduroy. Slim leg, cross pockets, hip pocket, heavy-duty zip fly (belt not included).

PediBares

When other shoes failed to please either me or my daughter, these adjustable leather baby boots worked out perfectly for both of us.

From the caretaker point of view they are relatively cheap, since they adjust up to the next size with a unique lacing arrangement and last twice as long as a regular pair of shoes. They are durable — Sarah's been walking in hers for almost two months with no sign of wear — and almost best of all, they cannot come off. Sarah constantly tried (and succeeded) in removing other shoes. She likes these.

From the user point of view they are flexible, they breathe (all leather), and they give protection while still permitting the feet to feel the ground. (The first time they are worn put a piece of masking tape on each sole for traction because they start out slippery.) Sarah says they are fine for all but the most formal of occasions. —*Andrea Sharp*

PediBares
Manufactured by:
PediBares
5746 East 8th Street
Tucson, AZ 85711

$14.50 and
$19.50
(for walking sole)
postpaid from:
After the Stork
P.O. Box 1832
Bisbee, AZ 85603
(Send foot tracing with mail order.)
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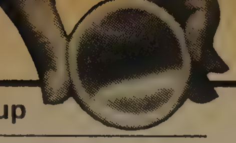

The disappearing Honey Cup

*Remember the Honey Cup (NFFD — nonspermicide fit-free diaphragm)? Devised by Edward Stim, M.D., it is based on the idea that you don't have to keep every sperm out of the cervix, just the minimum required for fertilization. Stim claimed that a 60 mm arcing diaphragm without spermicidal jelly would do that and was offering them by mail. Just after I reviewed the Honey Cup (***NWEC** *2nd Edition, p. 343), Stim became unreachable by phone. Orders sent to him by* **CQ** *and* **Catalog** *readers have been returned as undeliverable.*

Stim's incommunicado set me to wondering about his method's worth. I had used mine for six months without getting pregnant. I did get a slight yeast infection, which seemed preferable to the messy discomfort of a fitted diaphragm (a "fitting" diaphragm is the largest you can tolerate) with jelly. Still it seemed too good to be true and warranted further checking.

Felicia Guest, a family planning educator and author of **My Body, My Health** *(***NWEC** *2nd Edition, p. 344), said that because almost everybody in the business believes that contraceptive jelly is what makes diaphragms work, nobody would test diaphragms without it for the ethical reason of reluctance to expose test subjects to unwanted pregnancy. So no literature would exist to confirm or deny the effectiveness of Stim's method.*

Next I talked to Gary Stewart, M.D., another author of **My Body, My Health** *and the medical director of Sacramento Planned Parenthood. He had been doing some diaphragm research. In Stewart's opinion, sperm get around the diaphragm too easily for a jellyless diaphragm to work. He says, "I'm positive that people who use diaphragms alone get pregnant," but with what frequency is hard to tell because of the aforementioned dearth of research. Even without knowing the exact odds, I nipped out to buy some spermicidal jelly, whose price has gone up 30 percent since I got my Honey Cup. That's the bad news.*

The good news is that it may not be necessary to use so much jelly. In the presence of a diaphragm, jelly is effective for 24 hours and does its job within an hour. Stewart concludes that you can insert a diaphragm with jelly up to 24 hours before intercourse, remove it an hour after the last intercourse, and not have to insert extra jelly. Like Stim, Stewart says that fit's not important. The main thing is to keep the jelly covering the mouth of the cervix, and a small, unfitted diaphragm should do that.

Gerry Oliva, M.D., medical director of San Francisco Planned Parenthood, would disagree. She feels that fit may enhance the diaphragm-with-jelly's effectiveness, and if you're seriously trying to avoid pregnancy, you need all the protection you can get. As for trying Stim's method, she said, "You have to be pretty ready to use abortion as an option, and given the climate of the time, it's best not to set yourself up for that." (By "climate of the time," Oliva means the threats posed by the antichoice movement.)

My conclusion: if you don't want to get pregnant and would be unwilling or unable to get an abortion but don't want to use pills, an IUD, or tubal ligation, you probably should use a fitted diaphragm with jelly every single time you make love.

Personally, I'm inclined to trade off a little protection for some comfort and convenience and base my method on Gary Stewart's research. I'll use my Honey Cup with one shot of spermicidal jelly, inserting it up to 18 hours ahead of time and removing it an hour afterward.

Intrepid souls still wishing to try Stim's method will have to await his reappearance or order a size 60 Koroflex arcing diaphragm from a family planning practitioner and ask them to hold the jelly.

Meanwhile, my apologies for having boosted hopes for an effective, harmless, one-size-fits-all, disconnected-from-the-sex-act (what Felicia calls the "tube sex" approach) contraceptive. —Stephanie Mills

Discount America Guide

Each issue, these people pick a dozen or so categories of mail-order merchandise — anything from aquarium accessories to work clothes. They find the most inviting sources in each category and write it all up with a keen eye for bargains. —Art Kleiner

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The Incense Works (formerly Excelsior Incense Works) was developed during the 1960s with the help of Alan Watts. It was an effort to find scents other than Glade and Airwick. I discovered them eleven years ago. Now I don't get incense from anyone else. Not the usual olfactory-lollipop snowcone syrup found in headshops at all. Choices range from distinctively different sandalwoods and musks to amber kasturas to byzantine crystal incense to assorted nonflorals and even peony sticks from the People's Republic of China (very nice). Prices go from around 75 cents for a good-sized bundle of Tibetan rope incense to about $30 for 250 sticks of Japanese temple ecstasy. Samplers are offered. So are substitutions. My ordered goods always arrive between the second and third week after ordering. They also sell in bulk to dealers, monasteries, zendos, temples, and just about anyone. Spiritual Skies eat your hearts out.
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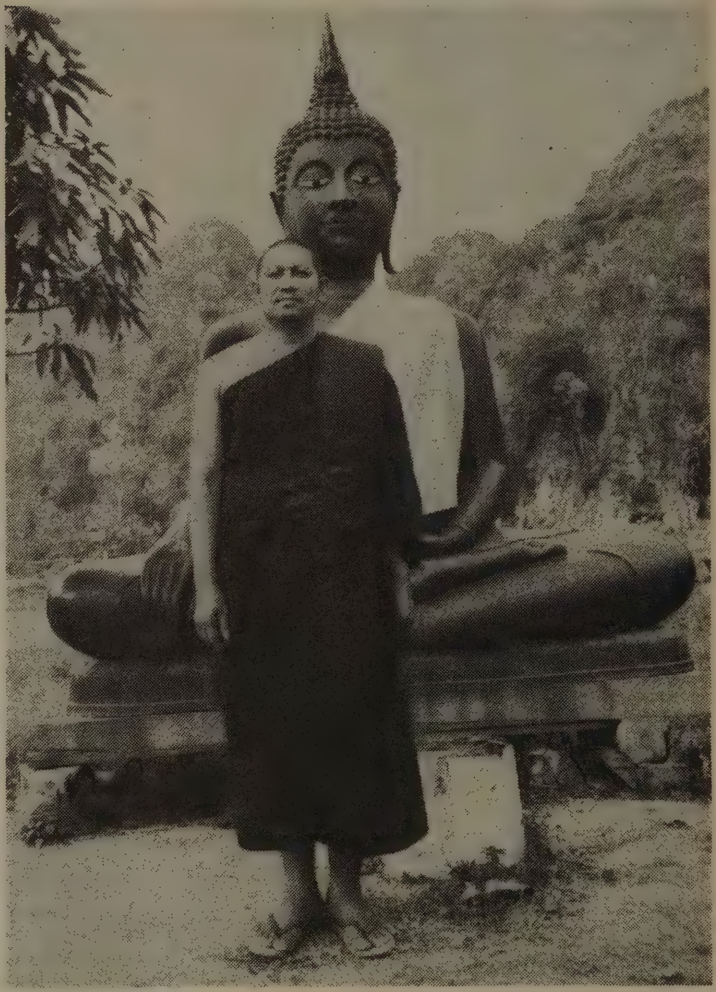
Curing Drug Addiction in Thailand

Surya green (she spells her last name lowercase) is a roving reporter from Amsterdam whose peripatetic turf includes much of southern Asia.
—Art Kleiner

Text and photographs by Surya green

DRUG ADDICTION and drug-related deaths, particularly with heroin and opium, are on the rise worldwide, so the governments of many countries are now paying increased attention to forces that might create or cure an addict. The practice of locking them up may apply to the illicit manufacturer or trafficker, but more countries are realizing that another system of treatment is more effective for drug users. It's called "indigenous" treatment, and it depends mainly on religion and herbal medicine. In Southeast Asia, where the drug problem is on the increase, one indigenous center stands out from all the rest: Wat Tham Krabok, a monastery about 80 miles north of Bangkok in Thailand. There, Phra Chamroon Parnchand,[1] a Buddhist monk, has treated more than 50,000 Thai and foreign addicts in the past 20 years.



Phra Chamroon Parnchand, the Abbot and dynamic force behind Tham Krabok, the Buddhist temple drug treatment center in Thailand

In 1975 Phra Chamroon won the Ramon Magsaysay Award for Public Service, Asia's equivalent of the Nobel Prize, for his work. This award is given by the Philippine government to private citizens of Asia who have devoted their time and effort to helping other people. It went to Phra Chamroon for "curing thousands of drug addicts with unorthodox yet highly efficacious herbal and spiritual treatment." Moreover, because Phra Chamroon's vow never to use any form of transport except foot prevented him from traveling to accept the award and the attendant cash prize of $10,000, it was presented to him at his own monastery. This was the first time, since its establishment in 1958, that a Magsaysay award was presented outside the Philippines.

Phra Chamroon's method is a unique way to keep addicts motivated, whether they are in a treatment community or not. He calls it *sacca*, the Pali word for "truth" or, more simply, "vow." A vow is the main ingredient of the medical-mystical ten-day treatment. This relatively new method contrasts with more generally accepted approaches to curing drug addicts. For example, the "cold turkey" treatment — abrupt, complete, and often

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[1] Phra, which could translate as "venerable," is a Thai title of respect for monks.

Tham Krabok as seen from the hilly terrain surrounding it

AN addict is treated only once. No second chances.

forced separation from the drug – does not usually work if, after treatment, patients return to the same unpromising environment which spawned their drug usage. More often than not, cold turkey merely provides a temporary physical break in the habit.

Methadone, usually administered in a hospital or clinic, is the treatment which the U.S. has settled on. It works by substituting heroin with another habit. It is cheaper than heroin and allows the patient to function again. But some people reject methadone maintenance as slight improvement. The body may be taken away from one drug, but another drug remains in the treatment – and in the patient's mind as well.

Acupuncture seems to lessen the desire for drugs, and in the late 1970s the U.S. National Institute for Drug Abuse entered into a contract with the government of Hong Kong, where such treatment was pioneered, to carry out a two-year study of the effects of acupuncture on drug addiction. The final report should be completed by the time this issue is in print and will be available free from the Treatment Research and Assessment Branch, 5600 Fishers Lane, Room 10A31, Rockville, MD 20857.

Richard Robert Hart, chief of the Narcotics Control Unit at the U.S. Embassy in Bangkok, said Thailand is considering a new "island" concept in treatment. Addicts would be segregated on an island until, as Hart put it, "someone magically pronounces them cured. The germ of this idea comes from a juvenile detention center in Hong Kong. It's a rough place run by tough police – long days, hard work, cold showers, for an undetermined period. Anyone in their right mind wants to get out as soon as possible. They can leave only when the prison head says so. Once out, if picked up again, they'll stay longer."

In direct contrast to involuntary treatment is the motivational cure: people give up drugs for a religious or social cause. As long as they believe in the cause, they stay clean. This approach has worked in the U.S., especially in the Synanon houses and the "born-again" Christian communities. Ex-addicts living together help each other resist temptation. Often, however, once the cured patients leave these communities their motivation evaporates and they return to their addiction.

Since, unlike other drug approaches, Phra Chamroon Parnchand's Tham Krabok treatment depends mainly on religion and herbal medicine, many observers – both Thai and foreign – say it is "unscientific." Yet, maintains Dr. Vichai Poshyachinda of the Institute of Health Research at Bangkok's Chulalongkorn University, which has a direct responsibility to develop appropriate assessment, control, and treatment programs for the Thai government, "the international community is showing growing interest in such indigenous treatment centers. Because success with the modern approach still falls short of expectations, naturally the whole world is looking for different ways. All of a sudden it is becoming evident that there is another system of treatment already operating in many countries, a system which works and deserves attention from people in the field."

Dr. Vichai is reputed to know more than anyone else about the addict situation in Thailand and often represents his country at international drug conferences. He studied the Tham Krabok procedure intensively for three years and wrote a chapter on the treatment center for a book to be published by the World Health Organization. He calls the center "one of the effective treatment programs originated from the private sector." Apparently, the Thai government thinks so too, as it has given Tham Krabok varying degrees of financial support over the years. Furthermore, Vichai states that "money for Phra Chamroon is waiting for him as a yearly allotment as soon as he will make an accounting system."

The question is: Has the Tham Krabok treatment anything to suggest to the drug treatment philosophies and methods evolving in the West? Drug treatment programs in the U.S. are hard to evaluate, but since scientific methods of curing drug addicts seem to have had very limited success – Robert De Fauw, who administered regional offices of the U.S. Drug Enforcement Agency in Bangkok and then in Detroit, says only two percent of addicts treated in the U.S. stay off drugs; Richard Hart gives a twenty percent figure – it is myopic not to look at any cure that produces successful results.

Phra Chamroon claims a whopping 70 percent recovery rate. Experts in the field scoff. They view the figure skeptically because he has no systematic follow-up. He claims to send out questionnaires to former patients and their families on a six-month and yearly basis, but the replies are not tabulated in the manner demanded by groups and agencies interested in the cure.

"I believe my statistics correct," maintains Phra Chamroon. "Why should I prove anything to others? The proof to me is enough. If I thought my former patients have been lying to me for 20 years, I wouldn't want to continue the treatment. Instead of criticizing, why don't the skeptics just send patients here? More can be learned from direct experience than from numbers on a paper."

Vichai would seem to agree. A scientist himself, a nuclear biologist, he says: "A recovery rate is not relevant. What matters is going back to the fundamental values of a socio-culture. Scientists say everything must be measured. That's ridiculous. Can you measure the prosperity of a country by looking at per capita earnings? Can you measure happiness by looking at a stack of money? The scientific community talks with figures. But all scientists know that any percentage can be manipulated. A recovery rate has usefulness, but is not the only yardstick. Some things are just not measurable."

So what exactly is the "unorthodox yet efficacious herbal and spiritual treatment" of Phra Chamroon? To understand Phra Chamroon's treatment, which evolved out of his strong personal power and individualistic approach to life, it is first necessary to understand something about the man himself.

PHRA CHAMROON is an ex-policeman. He was a 20-year-old high school graduate when he joined the Thai Royal Police in 1945. He quickly distinguished himself, winning an award for crime suppression after only three years on the force. His work involved crime detection and arrests — including narcotics addiction and trafficking — as well as undercover operations. As time went by the job escalated in danger.

"It got so that I had to look for something to lessen the risks," Phra Chamroon told me when I visited him in 1980 at Wat Tham Krabok. "Most Buddhists look for an outside power, something of a secret nature. I sought a legendary metal which supposedly gives its owner supernatural protection from all adversities. As I started seeking it, I noticed a power growing inside myself. A wisdom started coming that built my confidence to move through dangerous situations unharmed.

"Then one day while sitting in meditation, which is not an uncommon thing to do in Thailand, I saw a vision: A monk in a shining brown robe. He asked me: 'If there were something better than the metal you seek, would you take it?' I said yes. Desire for the metal dissolved. I wanted 'the thing that is better.' To find out what that was, what was there to do but follow the way of the monk? That seemed the message of my vision."

Simultaneously, it no longer seemed enough to be a policeman, "because the police can deal only with the wrong. They can't prevent it."

For counsel he visited his aunt, a mysterious figure who supposedly possessed amazing spiritual powers. Increasing numbers of monks were gathering around her as their spiritual head, something unheard of for Thailand, where Buddhist nuns exist only to serve the monks. Considered sexless, she was affectionately called Luang Poh Yai, "Big Reverend Father." Some people even thought her to be an *arahat*, an enlightened one.

Guided by Luang Poh Yai, the young policeman took ordination as a monk. Left behind were a wife and two daughters. ("I left a small responsibility to bear a much larger one.")

Next he went off alone into the jungle for five years. "I had to prove myself. Would I be afraid? I learned that it's easier to live with wild animals in the jungle than with the people in this age."

Then he joined his aunt, who until her death in 1970 served as his spiritual teacher and guide. With eight other monks they lived in a cave dwelling in central Thailand. They called the cave "Tham Krabok," Thai for its cylindrical shape. Over the next few years Phra Chamroon, together with his aunt, developed

Drug Addiction Is a Worldwide Flood

Provide services to drug addicts as part of basic health care? Yes. In fact, that's one part of the World Health Organization's (WHO) stated ideal that all people on this planet are entitled, as a human right, to basic health services. WHO is working to attain this goal by the year 2000.

WHO's inclusion of drug addiction in its health care concept dramatizes the magnitude of the drug problem in the world today. And that's just narcotic addiction; it doesn't even begin to include the abusive use of such drugs as sleeping pills, tranquilizers, amphetamines — or television.

The U.S. National Institute for Drug Abuse estimates that the number of drug addicts in the U.S. has leveled out or even decreased slightly over the last five years. But heroin dependency is on the upswing in Europe and Southeast Asia. "And in those places that we see decreased heroin addiction," says Robert J. De Fauw (see page 77), "we notice considerable increase in the use of marijuana and cocaine, especially among young people. So drug abuse is still a major threat."

Most governments are convinced that the best way to fight drug abuse is to battle it at the source of supply. That's why Bangkok houses narcotics teams from eight countries: the U.S., the Netherlands, Sweden, Denmark, Italy, Canada,

BECAUSE the newly-admitted junkies are too spaced out the first night to remember the vow afterwards, it is administered again on the last day of the treatment.

Intake registration at Tham Krabok. Many addicts arrive spaced out and ill, like Cholsin S., who is pictured here with his wife.

the ideas that would lead to his creating not only the drug treatment but also a new order of Buddhist monks.

Why a new order? "Because I am not one to follow a line of ants," he told me. "The established monkhood seemed too far removed from what I think is the original intention of the Buddha: to help others."

By tradition, Theravada Buddhist[2] monks confine themselves to study and meditation, shunning individual human problems. But Phra Chamroon believes in the monk's active involvement in social welfare. In many ways his monks thus violate the Vinaya, the 2000-year-old code of conduct for Buddhist monks. The Vinaya, for example, forbids heavy physical labor, such as tilling the soil. Yet at Wat Tham Krabok monks constructed most of the buildings. And there monks also treat female addicts, while the orthodox monk cannot even receive a cup of tea directly from a woman. As a result, Phra Chamroon is severely criticized, even ostracized, by the orthodox Thai monkhood.

For all the rules he breaks, however, Phra Chamroon has created new, austere ones of his own. All the 70 to 80 monks at Wat Tham Krabok take vows never to use vehicular transport of any kind, to eat only once a day, not to accept or use money, and not to leave the order before completion of the time undertaken. In addition, the monks go on a walking group pilgrimage, *tudong*, once a year. They walk anywhere from a week to three months, carrying all their own necessities and camping out along their route. The purpose of *tudong*, says Phra Chamroon, "is to accumulate wisdom, limiting the comfort of the body

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[2] Theravada Buddhism, literally "the way of the elders," is the oldest form of Buddhism. Sometimes called Hinayana Buddhism, it stresses the personal salvation of the individual.

Australia, and New Zealand. All work closely with Thailand's Office of the Narcotics Control Board. That area of Southeast Asia known as the "Golden Triangle," where the borders of Thailand, Burma, and Laos meet, accounts for the world's largest supply of heroin. Ninety percent of the heroin smuggled into Europe, and almost 40 percent of that reaching the U.S., originates in the opium poppy fields of the Golden Triangle.

Says De Fauw: "We try to cut off the supply of the chemicals needed to make heroin from opium, confiscate the finished products which leave the labs, and disrupt and immobilize the manufacturers and distributors at the source, or as close to the source as possible."

Nevertheless, despite some spectacular successes by Asian, American, and European police forces in recent years, hard drugs continue to flood the world. According to Richard Robert Hart (see page 77), "We say that if drug enforcement officers pick up ten percent of the stuff, they're doing well."

Meanwhile, the world's addict population grows. Says De Fauw: "Europe tends to underestimate the number of its addicts, but we think the figure compares with that of the U.S. Here in Asia the problem is increasing, particularly in the 15 to 21 age group."

—Surya green

to gain the happiness of the mind."

The number of Tham Krabok monks grew from nine in 1957 to 30 by 1959. That same year the Thai government banned opium smoking. Two addicts, unable to obtain opium, came to the monastery for help. Phra Chamroon felt he couldn't send them away (and to this day has a reputation for never refusing anyone help). Together with his aunt, supposedly an expert herbalist in addition to her other qualities, he devised an herbal treatment. The treatment has been perfected over the years and supplemented with religious, psychological, and social elements.

TO TRY AND UNDERSTAND the Tham Krabok treatment, I decided to approach the place as if an addict myself. Take a bus up from Bangkok, where the largest majority of patients come from. It chugs along a dusty main highway for two and a half hours, letting passengers on and off at requested places. Then stops in the middle of nowhere. "Wat Tham Krabok" yells out the driver. A few of the passengers look up, eyeing me curiously as I move down the aisle. I wonder if they think I'm a junkie.

It is a long hot half-mile walk on an unpaved road into the monastery proper. After a long stretch of wild tropical vegetation, I pass some half-constructed buildings where lay people are living in haphazard fashion. Monks, wearing the brown robes of a forest monastery, sawing logs. Monks gathering fire tinder. Monks sitting on wooden benches under trees, talking with lay people. Cocks chasing a hen. An open-air restaurant serving rice dishes and soda pop. Women in traditional Thai sarongs, long skirts, selling fruit by the road's edge. A fat man elaborately picking his nose, a popular Thai custom. Naked-from-the-waist-down children running and playing. Buildings large and small. Earth dusty from slight drought. Birds chirping. Fragrant scents wafting from small wooden shacks I later learn are herbal steam baths.

I approach an open veranda containing wooden tables and benches. Intake registration. The monks behind the tables don't seem surprised to see a white woman. (Five percent of their patients are foreigners, they later tell me.) They motion me to sit. 11:30 a.m. I later learn that registration does not begin until 1:00 p.m., and that the center's psychological treatment starts right here. No matter when an addict arrives during the 1:00 p.m. to 5:00 p.m. sign-in period, s/he is made to wait.

Finally I am waved to the table. The monk holds a long questionnaire. "What you addicted?" he asks. I don't mean to pull his leg, yet "cookies" slips out. He wrinkles his forehead. Speaks in rapid Thai to the monk at the adjacent table. I am waved away, back to the bench. The next addict is called.

Fifteen minutes later a red-haired Western monk, Phra Alan, appears. In clipped British English he says he understands there is a language problem. So is it coke I am addicted to, or what?

Phra Alan serves as guide and translator during my three-week stay at the *wat* (Thai for "monastery"). I wasn't accepted for treatment, so I console myself by experiencing the kick-off process vicariously. Several days after my arrival I start following 29-year-old Cholsin S. around. A factory foreman from a small town outside Bangkok, he can hardly drag his body up to Intake that first day. His 24-year-old wife helps him. He acts drunk, confused. Mumbles something about just having taken four injections of heroin and two vials of powdered valium. For some people, that would have been an O.D., but the monk just nods matter-of-factly, apparently used to such scenes.

Phra Chamroon – now himself called "Luang Poh," or, more simply, "The Abbot" – passes by. Although he delegates all of the actual treatment work to specially selected monks, he frequently pops in and out of the treatment compound. Something magnetic about his physical presence fascinates me whenever I observe him.

Now he inspects the scarred veins of Cholsin's hands and arms. "Recovery will be dramatic," he assures me while Cholsin, despite being as spaced out as he is at the moment,

"JUST as important as the vow taker is the vow giver. He must be chosen carefully."

The newly admitted addicts make a voluntary vow, or sacca, to abstain from drugs for life. Cholsin S. is second from left.

To cleanse the body and alleviate withdrawal symptoms, patients take an herbal medicine which induces vomiting. Thai schools often bring classes to vomiting sessions as a drug prevention tactic.

performs the Thai custom of bowing to the monk. I realize how deeply ingrained in the Thai character is a positive, trustful, and respectful attitude to any religious figure in robes.

But the Abbot is doubly respected. Many people believe him to have supernatural healing powers. That's one of the reasons there is also an herbal healing center for lay people at the *wat*. People with all sorts of ailments come for free treatment. One day I see a lay woman approach the Abbot with a sick baby. Without a word he holds the baby's bottle of herbal medicine for a few moments. Then blows into it. The woman goes off happily.

Back at Intake, Cholsin is now asked the crucial question every addict must answer before being accepted for Tham Krabok treatment: "Do you have the sincere desire to get rid of your addiction for life?" Had he hesitated even briefly before answering yes, he would have been sent away. Because, rating psychological treatment as 80 percent of his cure, the Abbot uses every psychological trick possible to effect recovery. That's why Cholsin is next told the center's rule that an addict is treated only once. No second chances.

After additional questions, mostly answered for him by his wife, Cholsin is taken to a nearby room. Some time later he reemerges wearing the drug treatment uniform: bright red trousers and white shirt. His own clothes and personal possessions will be returned at treatment's end. Phra Alan explains: "The red and white outfit is well known in this area. If a patient tries to escape, he or she is easily spotted and returned."

Cholsin's money is also taken away. "Another escape precaution," notes Phra Alan. In exchange, Cholsin receives his first daily allowance of 20 baht (about $1)[3] in Tham Krabok currency – specially made coupons and coins exchangeable in the compound for low-priced nutritious food as well as cigarettes. Treatment at the center is free, according to Phra Chamroon, "because otherwise they wouldn't come."

Phra Alan and I follow Cholsin, barely able to walk, to a large wooden building not unlike a barracks. He collapses on the ground before he can receive a sarong, foam mattress, pillow, and blanket, or be allotted a sleeping place on one of two raised wooden platforms taking up most of the building's floor space. Explains Phra Alan: "Patients change beds every night, moving from one side of the hall to the other. A systematic positioning of sleeping places lets the monks know who is in what stage of treatment."

That day, the other admittees are all young Thai men in their 20s. The total number of patients in the center at the moment is 65. This includes a handful of young Thai women who sleep in a partitioned-off section of the dormitory. There is also a shriveled-up Thai grandmother aged 65. And eight hill-tribe people kicking off opium. They come, one of the hill-tribers tells me through Phra Alan, because of the Abbot. He regularly sends trucks up north to the Golden Triangle area. A hill-triber costs the center 500

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3. To give some idea of relative value: The Thai government is currently considering passing a law providing for a minimum wage of 40 to 45 baht per day.

Cholsin S. is helped through a vomiting session by monks and fellow patients who have already finished with the detoxification part of the treatment.

baht ($25) for the ten-day treatment because of transportation costs to and from northern Thailand, some 50 miles away.

THE HIGH POINT of Cholsin's first day is his taking of *sacca*, the vow. The ceremony takes place in a *sala*, an open-air wooden structure that has only a roof and a floor. A large Buddha statue sits serenely on a raised platform. Incense burns. Phra Boonsong explains, from his own experience, what it means to make a vow. The boys know that, as a monk, Phra Boonsong keeps many vows himself. At only 32 the monastery's deputy abbot, he is someone they can look up to. Now they will vow to keep off drugs for life. He discusses the meaning and significance of the act. Then, in unison, they repeat after him the vow Phra Chamroon claims is the main element of his psychological treatment.

Not to the Abbot, or to the monastery, but to the Lord Buddha (if a Buddhist) or to the elements (if not), each addict pledges never to take drugs again, and furthermore, not to have any drugs in possession, nor to trade in drugs, nor to encourage other people to use or trade in or have drugs in their possession, nor to use drugs mixed with other substances as a medicine. (Besides smoking opium for euphoric effects, the hill-tribe people use it as a general cure-all.) Because the newly admitted junkies are often too spaced out the first night to remember the vow afterwards, it is administered again on the last day of the treatment.

"The exact meaning of *sacca* is truth," the Abbot tells me during one of our many talks as his "secretary for foreign affairs," Rambhai Singhsumalee, translates. "Truth meaning you have to do what you say. But, just as important as the vow taker is the vow giver. He must be chosen carefully. He must be someone who commands respect as a model to follow. Because the receiver is an empty battery that the giver must charge. If they are of the same level there is no benefit."

"What does it really mean to make a vow to the Buddha, or to the elements?" I ask.

"People usually depend on the actions of others. That's why we lead the addicts to depend on their own actions."

"Then why make the vow to Buddha?"

"History shows that Buddha's actions were excellent. That excellence has enough power to influence others. The addict gets connected with that excellence through the vow and the vow giver."

"Doesn't taking away the addiction and replacing it with a vow create another kind of of dependency?"

"Yes. You have to depend until you don't have to depend."

After the vow ceremony the boys are escorted back to the main building. There they line up on their haunches before buckets of water and empty spittoons. Phra Hong holds up a bottle of brown liquid. He explains that this herbal medicine is their last chance for recovery. It consists of 100 wild plants, herbs, and roots found on the monastery grounds. The patients must drink 30cc of it, wait 10 to 15 minutes for it to work in the body, then quickly drink the entire bucket of water. Vomiting will be immediately induced. Additional vomiting sessions will follow on the next four successive mornings. This treatment, supplemented by herbal tonics, herbal pills, and herbal steam baths, will purge drug residues from the body and alleviate withdrawal symptoms.

While Cholsin and the others in his group groan and vomit, patients who have already survived the first five days urge them on with spirited songs and jokes. Some pound conga drums, hands and feet; some dance; most sing together (in Thai):

This time you really have to stop.
If you don't stop this time,
you'll die.
You've smoked and injected a
long time; it's time to stop.
If addicted till very old,
you'll get great troubles.
Everyone knows if you go into
drugs again, you'll be
permanently bruised inside.
If you don't stop this time,
you'll die.

Every day, morning to night, this song and similar ones haunt the treatment compound like tribal drums warning of impending disaster. Part of the psychological blitz, they reinforce the superstition among Thais that returning to drugs after the Tham Krabok treatment means death, or at least great misfortune. Of course, those who return to drugs do open themselves up to many sufferings, if not premature death. The songs were written years ago by the monastery's monks, 40 percent of whom are

> **ADDICTS are not looked down on as criminals. . . Nor are the center's workers considered superior to them.**

Patients who choose to stay on at Tham Krabok after they complete the ten-day treatment can volunteer to help with the center's daily chores. Here a team prepares fuel for the center's wood-burning steam baths.

ex-junkies and graduates of the Tham Krabok treatment.

"The music and singing give the center a cheerful atmosphere, where we feel we're all in this together," an American addict named Rose tells me. A business executive in her mid 30s, she completed treatment two weeks earlier. She stayed on to strengthen up before returning to her residence in a nearby Asian country.

"Here I feel as if I'm part of a large family," she says. "Seeing so many people giving up drugs, especially the monks who have given them up and changed their lives, makes me feel that I can do it too."

BY THE FIFTH DAY Cholsin is officially "cured." On the sixth day he chooses his first solid food from among the hot dishes available in the food hall from 7:00 a.m. to 9:00 p.m. The warm Ovaltine he has lived on till now, the hot and cold flashes, the insomnia, the extreme physical discomfort and pain are over. He spends the remainder of the treatment period resting.

On Cholsin's eighth day Phra Alan and I approach him, explaining why we have been following him around. He doesn't mind, as long as his story won't be published in Thailand. No one must know he has been to the center. He fears social difficulties and losing his job. That is another reason he came to the monastery, not to a government hospital. Wat Tham Krabok has a reputation for keeping records confidential. He trusts the monks. In fact, he considers them an essential part of the treatment.

"They work hard and selflessly and sleep little," he says. "They are the ones you cling to. They guide you."

"How do doctors and nurses differ from monks?" I ask. Before Cholsin can answer, another patient who is sitting in on our talk responds: "Doctors and nurses are not pure enough. They're no model for you. They're just professionals doing a job. You can't believe in them."

Will he return to drugs, I ask Cholsin on his last day at the center. His "no" is adamant. Why so certain, I ask. What is so different now from the cold turkey treatment he once administered to himself?

He looks at his wife, come to fetch him, then answers immediately: "The vow. It touches on the superstitious nature of Thai people. If we make a *sacca*, it includes the elements as our witnesses. So we are afraid all the time, for instance, that lightning will strike if we break the vow. The vow is always in the heart. It makes the heart careful to keep the vow."

After the ten-day treatment, the supposedly cured addict is free to leave. But those who wish to remain longer, can. From their 11th to their 60th day at the center ex-addicts receive, in addition to the free accommodations and clothes, a daily food and cigarette allowance of 30 baht. In exchange they may be asked to assist the monks in light work around the compound. From the 61st to 180th day they receive 35 baht. Then they may feel strong enough to assist with heavier work, such as felling and sawing logs and making them into tables and benches, breaking up granite for concrete required for monastery constructions, and so on.

Various work projects run by the monks as income sources for the treatment center are considered rehabilitation programs for the ex-addicts. These include growing vegetables and fruits, agate cutting and polishing, and preparing herbal shampoo. New projects in the planning are an ironworks to make tools and window bars, a silk-screen printing and handicrafts unit, and expansion of an existing clothes-making unit run by lay people. There is also the Wat Tham Krabok Band, consisting mainly of ex-addicts. It livens up the monastery's recreation hall every Saturday night. Patients, as well as young people from surrounding areas, turn up for the free rock and disco dancing. The band also plays professional engagements in central Thailand, always including antidrug songs in its repertoire. A good many young Thais first hear about the treatment center through the band.

Sixty miles from the monastery is a separate rehabilitation center which Phra Chamroon started four years ago. According to him, there are 20 monks and a changing number of ex-addicts growing rice, corn, and other crops. He says the center's head is a monk who was formerly not only an addict but a big pusher. In addition, the Abbot is currently negotiating with the Department of Social Welfare of Thailand. He wants it to send vocational training teachers to set up a school-like program in one of the monastery's empty buildings.

SO FAR, nowhere in the world does there seem to be a treatment for drug addiction that is highly effective on a long-term basis. But the Tham Krabok approach is one of the most complete, and its central elements can perhaps contribute to the ongoing search for a treatment with long-term effect. While acknowledging the impact of Phra Chamroon's powerful personality and Thai culture and religion on the Tham Krabok treatment, we can also recognize the principles behind them. Adapted accordingly, these principles can be applied in any cultural context.

What is significant is that the Tham Krabok treatment is not just a treatment but a dynamic social process. The treatment center is no mere medical unit but a society made up of shared symbols, customs, and rituals. The Thai addicts share a language, similar personal histories, a superstitious national consciousness, a religious belief system, and a social order. This creates community. One belongs. Patients at Tham Krabok need not feel alienated (although some still do, and there are occasional suicides).

Furthermore, the community is supportive. Addicts are not looked down on as criminal or subnormal. Nor are the center's workers considered superior to them in a hierarchy. Many of the monks were once addicts themselves. They know the drug problem not merely from books or studies but from their own lives. They are examples of transformation, demonstrating standards of behavior and bearing which command respect and invite emulation. However, there are just enough of them chain-smoking and overeating — not to mention erring with female patients — to make their example humanly attainable. Also, the community atmosphere is not heavy. Even the "do or die" conditioning is transmitted through cheerful means.

And if some of the house rules seem harsh — no alcohol, no personal possessions, prisonlike uniforms, constant guarding by the monks, no leaving until treatment's end — they are balanced by some of the center's freedoms. These include free access to the food hall, singing and dancing without restraint, spending days doing nothing if so desired. At first glance the rules appear to be designed merely to control the addicts. But that may be underestimating the Abbot. Psychologists see conflicts in the makeup of most addicts, a need for both authority and the rejection of authority. The center's mix of rules and freedoms seems to allow room for this conflict.

Among the community's shared values are notions about personal responsibility, goodness and morality, self-protection and safety, personal danger and how to avoid it. All center around the vow, which at root is not so much a religious vow as a promise not to destroy one's own self. Who, even in a Western cultural setting, could not make such a promise? Then it would not be necessary to call on religious figures, gods, spirits, or natural forces as witnesses, but instead on the addict's sense of truth and self-respect. The vow must work at the addict's inner center, what we could call the inner substance of morality. The addict must be led to his/her own consciousness, there to accept that one does indeed have the ability to do something for one's self, and to experience that no matter what outer conditions might be, inside is a place where one can be true to self.

The ability to do something for one's self builds self-confidence which finds expression in outer actions. On the negative side, the breaking of a vow can create guilt. For if one cannot keep a promise to one's own self, to whom then? A feeling of personal worthlessness can result. But this kind of feeling is already well known to the addict. Thus, the risk of reversing it is really no risk, for what is the alternative?

As far as the physical weaning from the drug, this is the easiest part of any treatment. And if one doesn't have the recipe for a certain herbal purgative and pain reliever — to date Phra Chamroon has refused to release his medicine's formula because he fears commercialization or misuse of it — other alternatives will work too. Even plain old smelly garlic juice is known as a forceful body and blood purifier. Yet Phra Chamroon did tell me, when we talked about the adaptation of his treatment in other countries: "I am ready to give to those who wish to receive. But the voices asking me for help are too low. I cannot hear them."

As the final phase of the Tham Krabok treatment, vocational training and work rehabilitation opportunities are there when the addict is ready. Not to mention the possibility of becoming a monk, a sure way in any Buddhist country to obtain education, meaningful vocation, and respect from society. In a secular setting the opportunity for an ex-addict to stay on in a treatment center as a paid worker could function just as beneficially.

The critical phase in the treatment of any addict is said to be about six months after the start of the treatment. According to Phra Chamroon, this is no problem when one takes a life vow. "The Thai people have faith in religion, so I tap this. But every person, East or West, has some *sacca* in their mind or heart, something they believe in. It is up to those working on treatment methods elsewhere to find a *sacca* appropriate to their own cultural situation. As for me, I'd like to give all people in the world a vow. The vow not to destroy themselves. Not only not to do anything to destroy themselves, but also not even to say or think it. If all people took such a vow, we would have a world without weapon plants and wars." ■

Heroin Postscript

by Stephanie Mills

HEROIN USE is a problem. The main reason it's a problem is that heroin use is illegal. Heroin is less physically damaging in daily use than the licit drugs cigarettes and alcohol. The widespread concept of heroin as a monster drug stems from 70 years of propaganda in service of prohibition. Heroin withdrawal has been portrayed as hideous torture. (It can be experienced that way, or as a ten-day superflu followed by a period of insomnia. Withdrawal from alcohol and barbituates can be more serious, even fatal.) Ultimately it's the prohibition, which isn't particularly justified by heroin's character, that makes it a dangerous drug.

This is not to recommend heroin use, only to suggest that in prohibiting it society has come up with a cure that's worse than the disease. Forming a radical dependence on any substance (or person) makes life a chancy proposition – if the drug or the lover runs out, you're less than whole. However, given a clean, predictable dose and the possibility of sterile injection, it is feasible to live a productive life and use heroin throughout. You can meet those two conditions more easily when rich. If you're not, the prohibition on both the drug and on syringes may make getting and using heroin clandestinely quite hazardous to your health. The use of stashed, unclean needles can spread a variety of serious infections, from endocarditis to hepatitis and malaria.

So why use heroin or any other opiate? Heroin – diacetylmorphine – is analgesic and a potent antidepressant. It takes effect much faster than morphine, which is a boon to a lot of depressed and hurting people. Rather than showing compassion for the pain that drives people to seek relief in opiates, we punish. In spite of that, once heroin users have that experience of relief, few of them choose to stop the self-medication. One estimate is that only five to ten percent of users succeed in abstaining from heroin for more than a year.

Physical dependence is only one part of the story. The other is psychological dependence, defined by the World Health Organization as follows: "A pattern of compulsive drug use, characterized by an overwhelming involvement with the use of a drug, the securing of its supply, and a high tendency to relapse after withdrawal." The point, as any smoker, coffeehouse habitué, or bar-drinking alcoholic can tell you, is that drug dependence shapes a whole way of life. When the drug is illicit, the lifestyle is outlaw. In San Francisco it is estimated that a typical habit, fixing every four to six hours, costs three color TV sets a day. That makes for a heavy schedule of activity.

Getting past an addiction is difficult. The idea of a magic bullet style cure has a lot of appeal, but it doesn't address the reality that just as addiction is a way of life so must abstinence be. Nevertheless, drug cures for drug problems continue to be attempted. In the late nineteenth century, physicians prescribed morphine as a healthier alternative for the alcoholic. In the mid-twentieth century, methadone was thought to be an alternative to heroin. It hasn't worked out that way.

The presumed advantages of methadone, a synthetic opiate, are that it can legally be prescribed, it can be given orally (so can codeine and morphine), and it has a longer half-life in the body than heroin. Methadone withdrawal comes on 12 to 24 hours after the last dose, in contrast with 8 to 12 hours for heroin. The drawbacks are that methadone seems to leach calcium from bones, which can cause pain and breaking, and that methadone withdrawal lasts 6 to 8 weeks compared with 10 days for heroin withdrawal. Methadone, as Surya green says, is cheaper than heroin. But not innately. Heroin is a black market item. The prohibition against it, which is quite arbitrary, artificially inflates the cost. Methadone has also become a street drug and its costs there doubtless rival heroin's.

Heroin's illegality makes addiction a real problem. For that and other reasons programs which help the user desiring to kick are a blessing. Thus Surya green's report is good news.

In the U.S. there is Narcotics Anonymous, "a nonprofit fellowship or society of men and women for whom drugs had become a major problem." They say, "We are recovered addicts who meet regularly to help each other to stay clean. This is a program of complete abstinence from all drugs. There is only one requirement for membership, the honest desire to stop using. There are no musts in N.A. . . . Our program is a set of principles written so simply that we can follow them in our daily lives. The most important thing about them is that they work.

"There are no strings attached to N.A. We are not affiliated with any other organizations, we have no leaders, no initiation fees or dues, no pledges to sign, no promises to make to anyone. We are not connected with any political, religious, or law enforcement groups and are under no surveillance at any time. Anyone may join us regardless of age, race, color, creed, religion, or lack of religion.

"We are not interested in what or how much you used or who your connections were, what you have done in the past, how much or how little you have, but only in what you want to do about your problem and how we can help. . . . We have learned from our group experience that those who keep coming to our meetings regularly stay clean."

The mailing address of the World Service Office of Narcotics Anonymous is P.O. Box 622, Sun Valley, CA 91352. Their phone is (213) 764-3155.

Just as freeing oneself from an addiction is liberating, so would freeing society from the prohibition on drug use be. Prohibition never works.

Information for this article came from ***Understanding Heroin****, a book in progress by Reda Sobky, M.D.; from an interview with Howard McKinney, Pharm.D.; and from Edward M. Brecher's* ***Licit and Illicit Drugs*** *(NWEC p. 579).* ■

Redefining the Police

How neighborhood crime prevention changed "Murder City" back to Detroit

by Frank Viviano

NEIGHBORHOOD
WATCH
POLICE DEPARTMENT
BURGESS
BLOCK CLUB

DETROIT POLICE DEPARTMENT

Neighborhood Watch sign in Chandler Park

Imagine city life without the fear of crime. Organizing neighborhoods seems to be the only way to make that happen.

This is a three-piece piece. Pacific News Service (PNS) urban affairs reporter Frank Viviano heard that his hometown, Detroit, had one of the lowest crime rates of any major U.S. city, even though its unemployment rate was by far the highest in the nation, so he went back to investigate. His original crime article, written last summer, was printed by about five times as many PNS member newspapers as typically carry an article.

Frank's description of the Detroit crime prevention program is the definitive story on how redefining the police can change a neighborhood, but it doesn't say how to make it happen in your city. So I followed up by researching the practical politics and pitfalls. CQ regular Robert Horvitz, who wrote about shortwave radio for the ***Next Whole Earth Catalog****, concludes the trio by telling how listening to police band radio changed his attitudes about what the police do.*

—Art Kleiner

THE EXACT STARTING POINT of urban deterioration in the Northeastern United States may be a matter of debate, but I can fix with some precision the moment at which life in my old neighborhood, Detroit's Chandler Park district, began to visibly unravel. It was midway through 1955, when the Edsel Ford Expressway slashed through on its way toward the suburbs.

Initially the expressway had offered a combination of unintended entertainment and intended promise. For the children who crowded local schools in those baby boom days – I was seven years old then – the first stages of excavation meant the sudden appearance of a canyon to climb in. For our parents it meant the promise of a quicker journey to the Big Three auto plants where most Detroiters worked.

Some 18 months later, however, the canyon evolved into a forbidding concrete corridor, and while it carried my father to his fruit and produce market on the other side of town in a hurry, it also began carrying others by the hundreds of thousands to mushrooming new suburbs beyond the city limits. There were 1.9 million people in Detroit the year they began building the Edsel Ford Expressway. Just 17 years later the population – and the tax base – had dwindled to 1.2 million.

But the expressway did a lot more than generate a municipal cash crunch. In concert with six more limited-access highways that crisscrossed Detroit in the fifties and sixties, it transformed Motown from a city designed expressly for automobile workers into a city fit only for the automobiles they built. The expressways cut traditional ethnic neighborhoods into isolated chunks, blocked the paths to local business districts – which died agonizing deaths as they lost their customers to expressway-connected shopping centers – and rearranged the entire institutional life of the city as people changed schools, churches, and daily habits to conform to a new urban geography.

The expressways also loosed a terrifying skeleton from Detroit's closet: racial divisions which made Dixie segregation seem almost innocuous by comparison.

Until the mid-sixties, the containment policy of a brutal and virtually all-white police department had dammed black Detroit into an overcrowded, starkly defined ghetto which we called the "Black Bottom." It expanded no more than a few blocks each year to accommodate an exploding population of emigrants from Kentucky and the Mississippi Delta. Drawn by the then-booming job market, they usually wound up sweeping factory floors or handling the most dangerous (and least well-paid) tasks in the city's stamping plants and steel mills. And their homes were only marginal improvements on the sharecroppers' shacks they had left behind.

Yet racism in Detroit remained a kind of secret, much as it did through the rest of the North. In the meantime, the dam which held the Black Bottom in check slowly sprung leaks. As white ethnic neighborhoods emptied into the new suburbs, real-estate speculators engaged wholesale in the dirty business known as "block busting": using the threat of an incipient wave of black newcomers from beyond the dam to convince white homeowners that it was time to sell quickly and at alarmingly deflated prices. (As late as 1970 you could buy a brick three-bedroom home in Detroit for under $10,000.)

Then in 1967 the dam broke altogether. In a cataclysmic outburst, black Detroit burned down great swaths of the Black Bottom. At least 43 people died in the firestorm, and white Detroiters left in even greater numbers than before. In the vast acceleration of mobility after 1967, what little remained of neighborhood stability vanished.

The police had once been an army of occupation in the ghetto. Now armed to the teeth, they occupied a whole city.

These were the times in which Motown earned the name "Murder City," not so much reflecting a conflict that set neighbor against neighbor as it did a context in which the term *neighbor* had become meaningless. In Chandler Park, newly integrated in the aftermath of the riot, the half-decade which followed was an unrelieved nightmare. Black and white families alike were victimized by gangs operating out of the neighborhood's hundreds of abandoned houses, despite a massive investment in police manpower and tactical mobile units – which only seemed to exacerbate the problem.

From 1970 to 1974, burglary, larceny, and auto theft increased by 61.6 percent. "Everyone on our block – absolutely everyone – was robbed one year," remembers Alice Szawicz, a Chandler Park resident. "Even two policemen."

Nevertheless the bottom had been reached, simply because Chandler Park, like the city that surrounded it, was no longer racially divided.

Detroit had entered 1967 as one of the most thoroughly segregated cities in the United States. When it finally emerged from the riot's ashes a decade later, it was perhaps the most fully integrated of the nation's cities. Slowly a consensus began to emerge. Race wasn't the problem anymore. Crime was. And in the eyes of many Detroiters the police were demonstrably not the solution.

Like a lot of Detroiters I had a very personal

EDWARD R. NOBLE, OAKLAND (MICHIGAN) PRESS

Edsel Ford Freeway, the major artery that almost drained the lifeblood from the Chandler Park neighborhood in the background. The pedestrian walkway overhead is caged to prevent neighborhood kids from dropping bricks onto the windshields of passing cars and then running down to rob the drivers.

knowledge of what the city's descent into hell had meant. Along with the old neighborhoods our 50-year-old family produce business had crumbled, victimized equally by the profoundly destabilizing transience of the population and the economic strangulation performed by suburbanization. Behind soaring crime, after all, was the near-total absence of real community. The cops who kept their guns trained on our streets could do no more about that than they proved able to do about the nameless vandals who one night in 1971, torched the house I grew up in leaving a charred shell.

SO IT WAS that I found myself returning to Chandler Park – as a long-removed exile – late in the spring of 1981, attracted by reports of a new peace in Detroit that defied credibility. Chandler Park was the ironic highlight of the reports, enjoying a 56 percent drop in robbery from the 1977 level, as well as 60 percent reductions in breaking-and-entering and rape. If there was anything to those figures, I thought then something like a miracle had transpired.

And indeed it had, in the most unlikely of places and in the most uncommon way: Chandler Park was licking its crime problem because the cops in Detroit had thrown out the book and let the people in the city's neighborhoods rewrite it.

Under an imaginative new police chief, William L. Hart, the city's finest had embarked on their novel path at the end of 1976, replacing their emphasis on heavily armed mobile units with a lesson derived from the very black leaders whom Detroit's police had once despised for their threat to the enforced "stability" of Black Bottom days. "You could say that we decided to become revolutionaries," Fred Williams, a 25-year veteran of the department, told me. Instead of relying blindly on the old, deeply discredited approach of guns and nightsticks, "we became community organizers."

The process started with a decentralizing scheme that saw 50 police "mini stations" open all over town, staffed not only with police but also with some 2000 trained volunteers, residents of the neighborhood who acted as links between the police and the local population. More important, perhaps, Hart shifted the emphasis of departmental policies away from "reactive" or after-the-fact police action and toward actual prevention of crime. Commander James L. Humphrey, a specialist in prevention methods, was put in charge of a massive effort to implement the new policy. Then the real changes began.

Those changes are evident in the way police officers George Preston and Herbert Kaltz spend their workday in Chandler Park, where I joined them last spring. The old days would have found Preston, a former narcotics officer, and Kaltz, who worked the tactical mobile unit, patrolling these blocks in a squad car. Today Preston and Kaltz – one black, one white – operate from a quiet office in the basement of Emmanuel Lutheran Church, and they are most likely to be found in a backyard or living room somewhere in the neighborhood – not solving crimes but talking to people about their lives and needs.

In a neat brick bungalow on Philip Street, eight blocks from the church, retired tire-plant worker John Petross tells the officers about the time he opened his front door one evening five years ago and found a rifle pointed at his belly. Petross decided it was time to leave Detroit. "I just can't live with this," he remembers thinking. But the next day, Petross changed his mind. "My wife and I were driving down Philip when it hit me: We panic and give our homes away. That's exactly what's wrong. The thing to do was clean the neighborhood up, not leave it."

And that, says George Preston, is what makes the difference between urban devastation and renewal. “We can throw everything we know into beating the crime problem around here, but we can’t do it alone, and we can’t really lead the way. It’s up to folks like John, the natural leaders on the block. Our job is to make it possible for them to take responsibility for their own situation.”

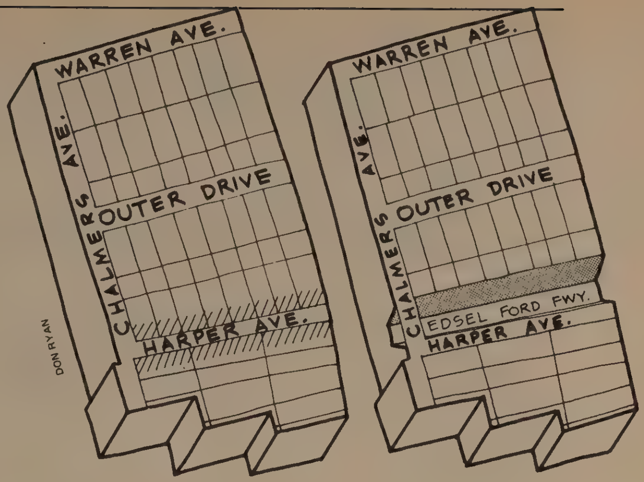
For the city’s 112 crime-prevention officers, that job has meant canvassing door to door on foot in search of neighborhood leaders to host block meetings. It has meant getting leaflets to every household, conducting 4000 residential and business security surveys to advise on precautionary equipment – locks, bars, alarms – and speaking to 500,000 Detroiters in 7000 different community meetings since 1976.

After the first meeting, which is primarily social, the officers begin a detailed discussion of prevention strategies ranging from ways to frustrate burglary to self-protection in the street. “Neighborhood Watch” and the larger program built around it are meant to serve as much more than inducements for neighbors to watch out for suspicious strangers. On each block, the program functions as a general clearinghouse for information relating to “safe urban living.” At regular intervals, the police make free “security surveys” of individual homes, on appointment, and provide counsel on changes in locks, windows, or shrubbery. In the city’s two target areas, senior citizens were given equipment necessary to effect such changes, and the equipment was installed by local merchants, neighbors, and the area’s crime prevention unit policemen.

Block residents and police meet from time to time to discuss other measures contributing to personal safety. In recent months, for example, meetings have been held or brochures distributed to provide tips on preventing rape, avoiding muggings, reporting crime, and spotting confidence operations. Again and again, police representatives make the point at these meetings that neighbors, not cops, are the only effective crime preventers. Police officials do take pains to emphasize that their program is designed to make it difficult to commit crimes – not to empower citizens to solve or respond to them. It’s up to citizens to take responsibility for themselves, and up to police to help them do it wisely and safely.

When the training ends, large signs bearing the name of the community organization are erected at each end of the block. The signs are “psychological barriers against crime,” says Lieutenant Norbert Kozlowski, assistant director of the Crime Prevention Program. “They indicate that the block is organized, that these people are not easy victims.”

But this is where the crucial catch applies. Neighborhood Watch only goes past the second meeting if 50 percent of the block’s residents actively participate. In the east-side target area where Preston and Kaltz work, some 100 blocks have failed to meet the 50 percent involvement requirement. “We must have citizens who accept responsibility and get involved,” insists Chief Hart.



1950 1960

Detroit’s Chandler Park neighborhood. Harper Avenue was its main shopping area before the Edsel Ford Freeway (Interstate 94) cut it off.

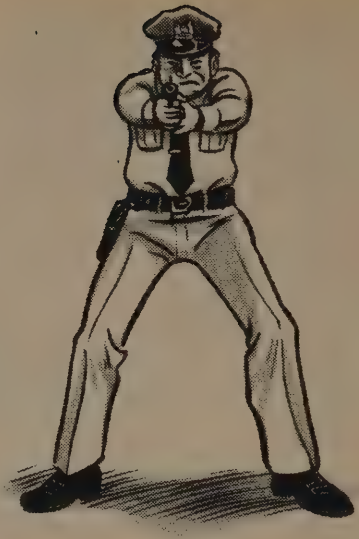
So far, 3500 Neighborhood Watch organizations have been incorporated in the city, and police have strong evidence in support of their effectiveness. In the first two and one-half years of the program in another special target area on the west side, crime fell overall by 65 percent. And when a follow-up team looked into the area’s burglary total for the last year, it discovered an even more remarkable fact: Every break-in involved a home that was not actively participating in Neighborhood Watch.

The key to this remarkable achievement – and what separates Detroit from dozens of other American cities that have toyed with halfhearted Neighborhood Watch programs – is that the twin concepts of community and self-responsibility are really taken seriously. The clock can’t be turned back to the pre-expressway era of neighborhood integrity, and, given the racial legacy associated with that era, it shouldn’t be.

But despite an almost desperate economic situation, Detroiters have found a measure of social stability and personal security that is the envy of more prosperous cities. And they have done it by reclaiming the *idea* of neighborhood integrity – without insisting on the return to a homogenous community makeup that is implicitly argued for in some circles today.

In short, Detroit is once again a city where the term *neighbor* has meaning, and the logical consequence is that criminals – not Detroiters – are on the run. ■

Can the Police Be Redefined?



The practical politics of neighborhood crime prevention

by Art Kleiner
Illustrated by Jay Kinney

"Traditionally, law enforcement has always been reactive, and that has not done the job. If you look at our crime statistics nationwide in the past 20 years, you see a 175 percent increase in crime. And in the only areas in this country where we see a reduction in crime in a neighborhood or community or city, you'll find as the underlying foundation that the citizens are involved in crime prevention programs." *–Inspector James Humphrey, who organized and now directs Detroit's neighborhood crime prevention program*

"We tried 'Operation Safe' in San Francisco five years ago. Its whole purpose was community building. Politically, it was very popular. It gave a lot of politicians a chance to mug before the camera. But the crime rate in San Francisco is still approximately the same as what it was before. These programs usually just displace the crime to a different neighborhood or change the modus operandi of the criminals. I presume that when they brought out the door lock everybody thought that too would save society from theft." *–Michael O'Neill, former police officer, criminologist, and police administrator, now a houseboat builder*

THE DETROIT CRIME prevention program which Frank Viviano describes in "Redefining the Police" is one of an estimated 150 or more neighborhood crime prevention programs in the U.S. Though the details of each vary, all such programs work by involving the people of a community in keeping themselves and one another safe. In theory, if neighbors care about and watch out for one another, and form a closer working relationship with the police, there aren't nearly as many opportunities for street crime or burglaries. When neighborhood crime prevention works as it seems to in Detroit, it makes neighborhoods more visibly crime-free and introduces neighbors to each other. When it doesn't, it seems to have little value beyond public relations for the police department.

I talked to nine crime prevention program organizers, both police officers and what the police call "civilians," to learn what makes crime prevention successful or unsuccessful. Some programs are designed by the police, who go into neighborhoods and organize them; others are organized by community groups, who ask the police only for training and support. Either way, the pivotal factor seems to be how much the police and citizens are willing to change their habits, and that often depends on how desperate the crime problem is. Often the places where crime prevention seems to work best – Detroit, New York, Philadelphia – are cities that were written off in the seventies as near bankruptcy and generally unlivable, cities where neighborhood feeling seemed lost.

One of the oldest crime prevention groups going was started out of desperation in Philadelphia. Ellie Wegener, one of the co-organizers, now makes her living consulting with other neighborhoods that want crime prevention. She said that in 1971 her block in West Philadelphia had been targeted by a ring of professional burglars and by a rapist who caught his victims on their doorsteps as they returned from shopping. "Even without all that," said Wegener, "the normal crime was pretty bad because it was a very diversified and touchy neighborhood." The first neighborhood meeting happened spontaneously after the third rape in a two block area in two weeks.

"It was part of a pattern that was freezing all the neighbors into horror and inaction," she said, "making them lock themselves up with their seven locks and not go out at night. When my friend was raped, the criminal threatened to come back and kill her and her two-year-old daughter if she told anyone. She refused to go back into her house, so she and her family of four came into our home. I realized that since we were all scared we all ought to help her. We invited about 12 of our neighborhood friends over for support the next day, and when the news got around that somebody was doing something about crime, 30 or 40 people showed up.

"Watching the people gave us the clue, because they were so interested in getting acquainted that they wouldn't shut up to talk about crime. We'd thought it was a closely knit neighborhood, but it turned out not to be. So I told them that out loud, and we finally started talking about the rapes and crimes. Then one person stopped us and said, 'Look, if this woman comes in at one a.m. because she's a night nurse, well, I'm an insomniac, so I could watch for her.' Another said, 'If we're afraid to go shopping, let's go shopping together.' And that was the answer right there, although we didn't know it yet."

That type of watching out for one another – usually called "block watch" – is probably the most effective element in crime prevention programs. The most successful programs are organized around single blocks so that everyone knows each other and they'll all fit into a single meeting. In neighborhoods of apartment buildings, a watch group is often limited to the tenants of a single building. Usually block meetings involve making arrangements to keep track of one another's schedules and filling in everyone's names and phone numbers on a map of the block.

"A lot of crimes happen because people are afraid of each other," Ellie Wegener said. "If you don't know the person across the street and hear a scream, you have mixed feelings. You might not do anything because the guy might be beating up his wife and maybe he'll beat you up next if you get involved. But if you know the next-door neighbor, and most people who know each other like each other, you won't stand by and let something happen. Especially if you've agreed before what to do.

"If it's a crime in progress, for instance, you call the police and then let whoever's inside know by yelling, without making yourself a target for a gun, 'Hey get out of there. I just called the police.' That kind of thing is enough to make a criminal get out as fast as possible."

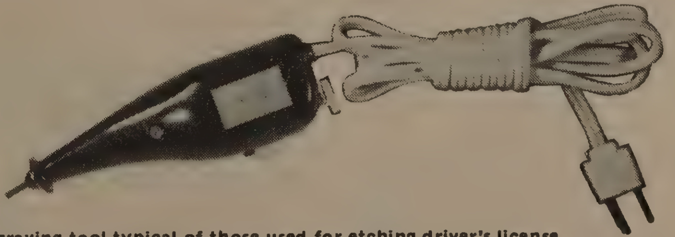
There's consensus that block watch does not work unless a majority of the people on a block are involved. That's where Detroit's quota came from – if 50 percent of the families on a block have representatives at three meetings in a row, then the police put up neighborhood watch signs and help maintain the block watch organization. Otherwise, they'll talk to the families that do show up, but they won't organize a comprehensive program. Most blocks produce the quota. In Seattle and New York, where there are also police-run crime prevention programs, they don't have quotas, but they said at least 30 to 50 percent of the residents should be involved.

You, like me, may have reservations about a system where neighbors are encouraged to keep eyes on one another and report aberrations to the police. The block watch organizers whom I talked to said that a few people are reluctant to be involved for just that reason, which in turn (I think) might make their neighbors more suspicious of them. No one I talked to had a satisfying answer to this, other than that people nearly always *want* less anonymity. They want to know their neighbors. I've heard of no place where crime prevention was used repressively except possibly Oakland, where, a writer told me, block watch was used by the police to keep tabs on the Black Panthers.

CRIME PREVENTION programs work differently in different types of communities. "Every neighborhood has a different population, different economic problems, different crime problems," said Richard Shapiro, the New York City Police Department director of civil participation. "You have to design each program on a case-by-case basis." Here are some of the more common features:

Operation Identification. Detroit Inspector James Humphrey described it this way: "You're asked to put a code number, usually your driver's license number, on your possessions. Since we have a national computer hookup, an officer recovering your television set can check the number and we can notify you." Homes that have worked this out with the police get window stickers which are intended to deter burglars. Operation Identification was organized nationally by the federal Law Enforcement Assistance Administration (LEAA) during the seventies. The LEAA, a consistent funder of block watch and crime prevention, is just now being dismantled.

Home Security involves a police check of peoples' homes. In Detroit, which is mostly a city of single-family homes, that means checking the doors, locks, lighting, and garage. "We found that about 35 percent of the homes that are broken into are entered through unlocked doors and windows," James Humphrey said. "Another big



An engraving tool typical of those used for etching driver's license numbers on possessions in Operation Identification

percentage is through inferior locks or security devices."

Citizen patrols. Richard Shapiro said these have worked well in New York. "In poorer neighborhoods, which have mostly apartment houses, we do tenant patrols. We put people in the lobbies of buildings to screen who comes and goes. We teach them how to do a vertical patrol, where they go up to the top floor in the elevator then walk down the stairs and across each floor and down to the lobby until they've flushed the building. They're volunteers, trained by the police, given police identification and radio equipment. In the middle-class areas, where there's more discretionary income for gasoline, we set up volunteer car patrols."

Anonymous informing. Detroit and New York have identification numbers for crime prevention program members so they can report crimes without fear of retribution. But can't the numbers be traced? "Not without going through Richie Shapiro for the entire city of New York. I safeguard those lists personally. We have been subpoenaed into courts of law to divulge those names and we have refused and we're not in jail at the moment. That is confidential informant status."

Commercial Block Watch. Shapiro set up a tactic called Safe Haven for single upwardly mobile neighborhoods. "A single person who just took an apartment in SoHo or the Upper East Side of Manhattan has only a very weak community identity. Since a lot of your street robberies take place on the commercial strips, we take a group of store owners and organize them into a merchant's association. We train them how to assist people who are in distress and how to tell people who are truly in distress from people who are maybe bad guys. We teach them how to observe and report situations. Then we give them signs for their store windows that say this is a Safe Haven and we go public to the single constituency and say, 'This sign is a place you can turn to for help.'

"Now we accomplish several things in that. One, we prevent crime, because once that commercial strip develops its identity and visible things like those signs go up, the criminal element gets the message very quickly. Two, you've taken a mobile population and said to them, these stores don't just want your money, they care about you as human beings. And three, you're assisting the merchants. You're building their businesses with goodwill and that's good for us, because there's less crime in a stable shopping district than in one with transient stores."

Storefronts. Volunteers staff police mini-stations set up in storefronts. James Humphrey said there are 50 of them in Detroit. "During the course of a day a volunteer would answer the phones, maybe do telephone reassurance, call up other senior citizens in the neighborhood who live by themselves or who are mentally or physically impaired. They might hand out crime prevention literature or canvass a block to notify residents of the program."

Betsy Lindsay, one of the city-employed organizers of a successful neighborhood crime prevention program in Seattle, said that they're usually too expensive to keep up. "If you can bring the neighborhood officers in for coffee or for a local meeting, that would probably have the same effect for a lot less money." And Michael O'Neill, who helped set up mini-stations in Holyoke, Massachusetts, said they didn't reach many people. "We had kids who washed the cops' cars and got paid off in dimes. We had a contest for designing a new police emblem. But we only reached a small segment of the population. We didn't turn the bikers into nice people. We gave them an evening of pleasant interaction with the cops in a storefront, but they have lots of unpleasant interaction with the cops too."

Environmental design. The police in Hartford, Connecticut, reorganized dead-end streets and parks to make mugging and street crime more difficult. But it's more important that architects and building code writers create apartment buildings where, say, people can see the doors of their neighbors, or where there isn't a labyrinthine network of walkways for the vulnerable to pass through.

DEFENSIBLE SPACE

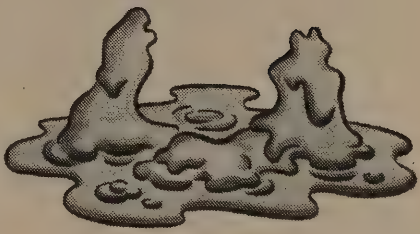
Good planning: In this L-shaped building, the kitchen windows of the apartments on both sides of the entry and at each level are adjacent to the entry and stairwell and look down upon the walkway, which leads to a play area.

Here's a quote from one academic (but good) study of a housing project in a northeastern city:

> The apartments cluster around interior parking spaces rather than facing onto a street. Residents rarely sit at their windows and watch the parking area in front of their apartments. Yet it was the constant surveillance of the street by regular window watchers that Jane Jacobs argued contributed so significantly to the order and lack of crime in the North End of Boston (1961). People in the North End watch the street because it provides an entertaining and changing scene. In Dover Square, however, there is little to watch. Children occasionally play baseball or soccer in the parking area, but there are few pedestrians and little traffic. The scene is neither varied nor interesting. Nor is there much sidewalk sociability. A few adults put chairs on their front steps and sit outside, saying hello to people who drive by, or stand for a time talking to friends who walk by, but mostly there is no one sitting in front of his house. Only one group of families regularly socializes in front of their apartments; they live in the only block of apartments that faces outward onto a normal street. This lack of sidewalk sociability and window observation is particularly surprising since almost half the white and black families originally lived in the adjacent neighborhood of James Hill, where stoop-sitting is a traditional form of visiting and people do watch out their windows.*

Michael O'Neill suggested an authoritative, well-illustrated text for architects on this subject – **Defensible Space: Crime Prevention through Urban Design**, by Oscar Newman (1973; $9.95 postpaid from Macmillan Publishing Company, 866 Third Avenue, New York, NY 10022).

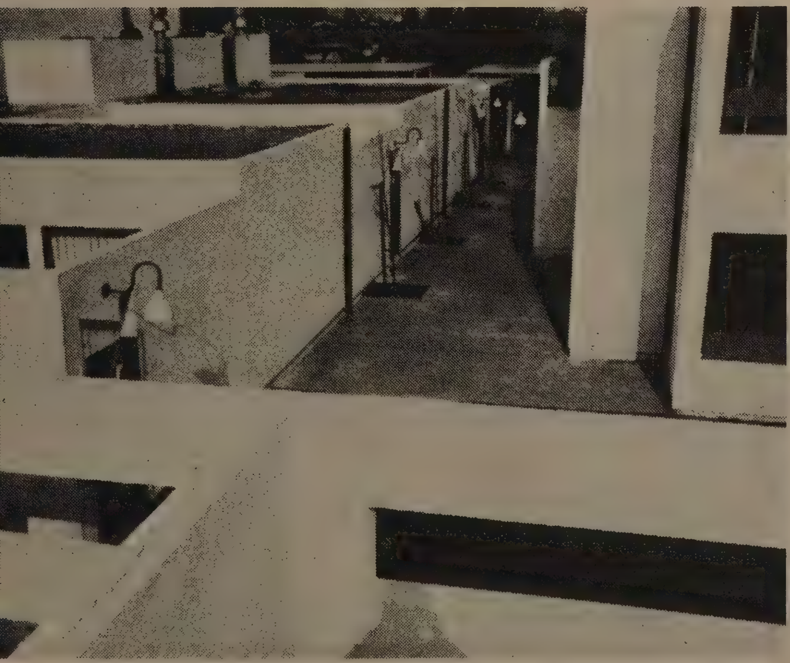
EVERYONE I TALKED to agreed that a neighborhood block watch group can only work if it lasts for years, remaining stable as people move in and out of the neighborhood. The Seattle police send out a newsletter to all block watch members; Detroit crime prevention officers regularly write everyone on their blocks. What crime preventioneers call "maintenance" usually can't happen unless the people who come together because of crime move on to deal with other problems in their neighborhoods. Failing that, they lose interest in talking about crime, the block groups drift apart, and the problems return.



Ellie Wegener said a block group often evolves by trying to work out some of the root causes of crime, such as unemployment. What, I asked, can a neighborhood group do about unemployment? "It depends where they're starting. Any neighborhood group can start a simple system where teenage people can find odd jobs, babysitting, cleaning out garages, things like that. But an awful lot of people don't know which kids in their neighborhood can be trusted – until they meet them through crime prevention."

Sometimes block watches organize picnics or softball games. Others get involved in local politics, dealing with garbage or noise, trying to get better lighting or more trees. In Seattle a block watch group tracked down the landlord of an abandoned house where the grass was becoming a fire hazard and got him to take care of it. "That kind of thing reinforces a block watch more than listening to a speaker on rape prevention if rape isn't much of a problem there," Betsy Lindsey said.

But that means the police who organize communities for crime prevention inevitably become



Bad planning: These windowless walkways require residents to walk along an almost totally unsurveyed path when returning to their homes from their external parking facility.

****Urban Danger: Life in a Neighborhood of Strangers**, by Sally Engle Merry (1981; $18.95 postpaid from Temple University Press, Philadelphia, PA 19122).

neighborhood ombudsmen, referring people to other city agencies or trying to help solve small problems themselves. Only a few police departments seem willing to take that as part of the job.

"The officer becomes not only a police officer but a social worker," said James Humphrey. "A senior citizen might need emergency food or clothing, or someone might need counseling or to be plugged into an athletic program or church. An officer's supposed to be aware of social service agencies and other resources, and he or she is supposed to make information referrals. So it does make the role of a police officer much looser and it requires a lot more work, and a lot of officers who aren't in crime prevention fight that. They want to stick to their John Wayne or Wyatt Earp syndrome. It's easier for them just to be dispatched and handle something, rather than treating the citizen as a client, getting to know their needs."

Crime prevention departments are considered merely as public relations by most police chiefs. They have one or two officers who do public speaking or pass out home security leaflets. And community members talking to a crime prevention officer know that what that officer says will have very little to do with the real police. The mainstream police culture – patrol and investigation – is a macho culture. It doesn't fit easily with a service role.

"For years I tried to change that," Michael O'Neill said. "But the police are not in a good position to be do-gooders. They don't create crime, they just react to it. They're hired muscle, and they know it. One cop I knew in particular was a good teacher and mediator. He was a real friend of the weak and the poor. But after a while, he felt his standing among his peers had diminished. So he became a narc to build back his stature."

In a city with tensions between police and, say, the black or gay communities, neighborhood crime prevention is even more difficult. Residents don't trust the police, so they don't report anything suspicious, and the police don't or can't get close enough to organize citizen patrols or block watches. But organizers say the block watches decrease racism because they force people to talk to each other.

"We haven't really found the racial thing to be a problem anymore," James Humphrey said. "We found that once a block stabilizes and people stop moving in and out, then people on that block can have good relationships regardless of the racial makeup. The same is true of the police department. I have no problem sending a white officer to talk to an all-black group today, or vice versa."

If you want to try to convince

STEPHEN F. WHITNEY, PROVIDENCE JOURNAL-BULLETIN

← A police officer in Providence, Rhode Island, where Robert Horvitz lives

Listening in On the Police

by Robert Horvitz

I BOUGHT a police-band radio scanner last year (a Bearcat 220 – nice model, no longer produced) and it completely changed my perspective on the police – not to mention my perspective on my community.

For one thing, violent crimes are actually rather rare, relative to the number of complaints the police receive. Most "complaints" are help-seeking; many involve no violation of law. People sometimes call the police just because they don't know who else to turn to. This means that cops are called into situations – like family arguments or bizarre rescues – that they are not really equipped to cope with, can't do much to help, and yet can be blamed for if they fail to help. Sometimes the calls are for problems so minor that I almost want to call headquarters to apologize for the dummies they have to deal with. Today, as I write this, we're having the worst cold spell of the century. All over the city, cars are stalled, medical emergencies are piling up, power lines are down – and a woman called during evening rush hour to say her cat was sick, could a squad car take her to the vet?

When entering a tense situation, police sometimes affect a hard-a police department that crime prevention works better and costs less than traditional law enforcement, the statistics are probably on your side. Programs in Detroit, New York, and Seattle targeted specific neighborhoods and showed a decrease in both the crime rate and police costs. In Seattle, community organizers employed by the city set up a program in one neighborhood with no police assistance beyond things like Operation Identification, home security checks, and crime-reporting training. When the program proved successful, the police department asked to manage it and made it the basis for a city-wide program.

"We showed them what it costs per household, with and without crime prevention," Betsy Lindsay said. "From the moment when I the victim call the police and ask them to respond to a burglary, through the investigation and report to the arrest and prosecution, the average burglary costs the city $1000. In the first year of crime prevention, we did 2700 homes and it cost $48 per home. That dropped to $12 in the second year and went back up to about $18 in the third year. Although we can't prove it, we estimated that crime prevention saved about 350 burglaries from happening city-wide." James Humphrey didn't supply me with the cost figures that he used to convince the Detroit police department, but he said that after the first year, using demographic market research and crime reporting statistics, "We were able to say unequivocally that we were reducing burglary by 30 to 40 percent. The second year we were up to 60 percent reduction in burglary."

But crime statistics are misleading. The statistical crime rate depends on how police officers report crimes, and on how the reports are measured — by specific neighborhoods or by times of day, for instance. As Betsy Lindsay said, it's more illuminating to hear the stories that come up in conversation when people feel safer. But even those have to be considered from the perspective that most of the people who talk about crime prevention earn their living to some extent by selling the programs. As Michael O'Neill told me, there is no way to tell for certain if crime prevention works as a whole. Perhaps it just pushes the criminals to neighborhoods that haven't been organized yet. And when an entire city is organized, then some burglars may be members of the block watch.

SO DOES ALL THIS work? I heard both yes and no in detail, both convincingly, sometimes from the same person. The only certainty is that crimes decrease in cohesive neighborhoods, however they've been "organized." There's proof of that here in Sausalito, which the **San Fran-**

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boiled, insensitive, macho air. I used to think that this was because they were hard-boiled, insensitive, macho people. Now I see it's a learned technique. Whether it's good, or works, I can't say. But there's more to the average cop's personality than what you see in public. Over the radio, you hear a more careful, restrained side — possibly because on the radio they're dealing with information rather than people, and in many cases, information damaged (a garbled license number, a misspelled name) is information lost. Information lost can mean failure to apprehend, a lost conviction, even a lost life.

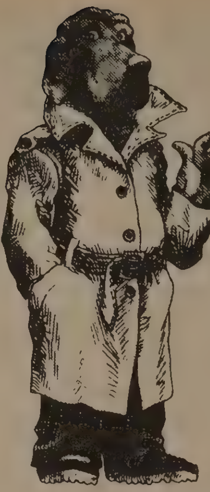
Similarly, unless a cop actually witnesses the commission of a crime, the chances of the perpetrator being caught directly depend on the quality of information the witnesses and complainants provide. Often — too often — well-meaning people contribute to police failure by giving incorrect or inadequate information. Last summer I heard a dispatcher say that someone had reported a teenage male vandalizing cars parked along a major street. He had a pickaxe and was walking along puncturing roofs, tires, and windows. The complainant gave a full description and then hung up — without saying where along the 20-mile road (passing through three police districts) the vandalism was occurring, all but ensuring that the vandal wouldn't be caught unless someone else called. No one else did.

I've also monitored situations where amateur heroics are no substitute for police experience, training, and equipment. Even in a relatively simple case, like an armed robbery, chances are the perpetrator will have had much more practice getting away from someone like you than you will have had containing someone like him. Know your limits before leaping to the rescue.

Finally, I've learned that no matter how weird you think you are, there's someone living nearby who's a helluva lot weirder. It's both scary and reassuring to discover that the limits of human behavior are much farther from "normal" than you've ever been; with a police-band radio you can ponder those limits in the safety of your own room vicariously. (Note: It's illegal to divulge anything you hear on the police channels, so in the "quotes" above some details have been changed to protect the innocent — me.) ■

cisco Chronicle said has one of the highest per capita crime rates in the Bay Area. Yet people who live in the closely knit houseboat community here say it's almost completely free of burglary and violence. No police force by itself can make a neighborhood cohesive in that way, Michael O'Neill said. A group of individuals could conceivably turn a scattered, crime-ridden neighborhood into a cohesive one, but only with a tremendous amount of work.

And to become really safe, your city probably needs to do more than just redefine the police. "Look, property crimes are caused by people who haven't acquired property in the traditional manner," Michael O'Neill said. "They use what resources and methods they have to get this property. Maybe we need to open up the economy and give these people more of a bite into the middle class so they'll believe in private property." He also said that cities should be designed with an eye on crime prevention. "If people work and live in the same place, it's easier for them to keep track of their community. You have to rearrange traffic and job patterns with an eye towards making cohesive neighborhoods. Of course, it's hard to do that without shutting your city off from outsiders."


McGruff

I haven't personally participated in any block watch programs, or talked to many nonprofessionals who have. If you have organized or been part of a neighborhood crime prevention program, or have other experiences which illuminate these ideas, please feel encouraged to write me at **CQ**. In the meantime, these resources may help you start a block watch group of your own:

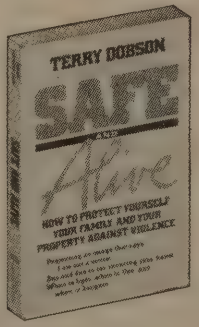
The Crime Prevention Coalition, P.O. Box 6700, Rockville, MD 20850. Funded partly by government and partly by corporations, it offers a series of free booklets which are simple, direct, and full of suggestions. The only problem is, how can you trust a group that uses a trenchcoated cartoon dog called "McGruff" as its symbol? Still, hype aside, their material is the most comprehensive I've seen. **How to Protect Your Neighborhood** (1979; 20 pp.) is worth asking for.

Community Crime Prevention: A Neighborhood Action Guide, by Ellie Wegener (1979; 20 pp.; $2 postpaid from Civic Action Institute, 1010 16th Street, NW, Washington, DC 20036). They ran out of printed copies of this, so now they xerox them. Lots of specifics and case histories for people who want to organize their neighborhoods. ■

Safe and Alive

This is a good book about how to build a bubble around yourself and your home that no one can break through unless you want them to. Most of the book's arsenalful of suggestions are influenced by aikido principles of blending and nonresistance — even in mechanical sections on weapons and locks. There's not much on self-defense techniques (the authors list other references) and nothing on organizing neighborhoods or the causes of crime. It's pure self-preservation. I personally still can't read it without rebelling inwardly at the necessity for building bubbles around ourselves, but (sigh) most of us still need them when we navigate around cities. New urban residents who haven't picked up street smarts on their own will especially need this book. —*Art Kleiner*

Safe and Alive
(How to Protect Yourself,
Your Family, and Your
Property against Violence)
Terry Dobson
1981; 160 pp.
$3.95 postpaid from:
J.P. Tarcher, Inc.
9110 Sunset Boulevard
Los Angeles, CA 90069
or Whole Earth
Household Store


TERRY DOBSON
SAFE
AND
Alive
HOW TO PROTECT YOURSELF YOUR FAMILY AND YOUR PROPERTY AGAINST VIOLENCE

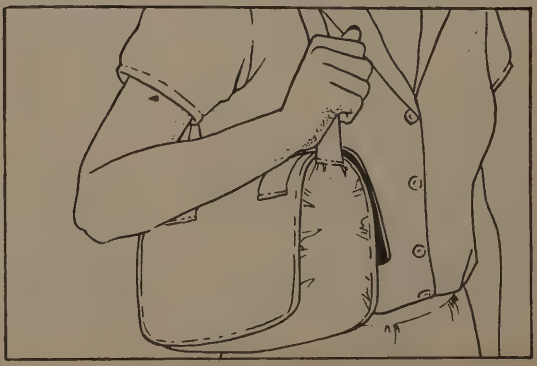
•

If you face a person with a weapon, look at the person, not at the weapon. By itself, the weapon can't do anything; your problem is not with the weapon but with the person who holds it. Therefore, make and maintain eye contact. Speak quietly and reassuringly. Try to calm and soothe him by providing assurance that he has nothing to fear from you. This is especially important with someone under the influence of drugs or alcohol or someone having a "psychotic episode" or a break with reality. Such people may be easily excited and see danger multiplying around them. Although a gun is inanimate, it has a tremendous power of attraction because of its death-dealing potential. Resist all temptation to look head-on at the muzzle of a pointed gun. It is like looking down a deep, dark tunnel, and it can terrify and immobilize you.

•

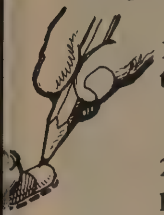
Fight forward, not back. This suggests both a psychological attitude and a physical stance. "Fighting back" implies that the attacker has the initiative and that you are seeking revenge. This must not happen. You must be prepared to take the lead immediately — not by striking back at your assailant, but by driving forward through him as if you were charging through an open door. You must be filled with righteous anger, using it to protect both yourself and your attacker. Beyond saving your life, you are possibly minimizing the consequences he would face were you to be mortally wounded.

Keep flap side of your purse close to your body.



Wha' Happenin'?

Cityfolk: Where were you on the "Where You At?" quiz on page one of the *CQ* Bioregions issue (Winter 1981)? Did you name Dow Chemical as one of the major plant associations in your neighborhood? Well, don't measure your anus for a hatband yet. Urban sense of place comprises social as well as environmental diversity. Here's an urbanocentric quiz that combines the two. Give yourself one point for each question you can correctly answer.

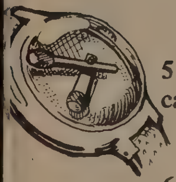


1. Trace the drugs you ingest from grower to consumer.

2. How many days until your next garbage pickup? What Mafia clan is responsible for it?

3. What major landforms once existed where your city is now?

4. List the seven kinds of litter most commonly found in the public parks of your area.



5. When and where was the most recent case of arson in your city?

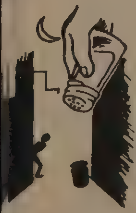
6. What was the ethnic group that first lived in your residence and where do they live now?

7. Name five languages other than English spoken in your city. (Bonus: 1 point for each language in which you can count to ten.)

8. How many days last year was it unsafe to venture outdoors because of extreme air pollution levels?

9. What processes are used to treat your drinking water? (Bonus: What synthetic chemicals are still there when it reaches your tap?)

10. What's the hardest part of your city to reach by public transit from your residence, and how many times do you have to transfer to get there?



11. Name the four places on your way home from work where you have the greatest chances of getting assaulted.

12. What time do the people in the next apartment go to bed? How long do they fuck?

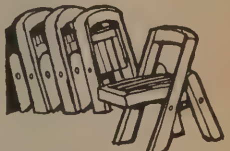
13. Name five varieties of nonheterosexual behavior in your neighborhood.

14. Name the five most played salsa singles on the jukebox of the nearest Latino restaurant.

15. Describe the five apartment buildings in your neighborhood that were most recently victimized by condo conversion.

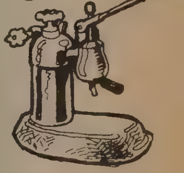
16. What major special interest groups influence the politicians in your city?

17. Imitate five sounds of the street that you ordinarily tune out.



18. What's you nearest neighborhood association, and when does it meet?

19. From where you're reading this, point toward the nearest cappucino machine.



20. Identify the three blocks of your neighborhood where you're most likely to step in dog shit.

SCORING

0-3	Go back to the 'burbs.
4-7	It's hard to have street smarts when you don't keep your eyes open.
8-12	You're awake, but you probably spend most of your waking hours scraping your shoes.
13-16	A concrete grasp of the facts.
17-19	You know wha's happenin'.
20	You know your environment better than any of us do!

Quiz compiled by: Steve Bennett, Ruth Loetterle, Jay Kinney, Joe Kane, Art Kleiner, Stephanie Mills, and Stewart Brand. Illustrated by Don Ryan.

WHOLE SYSTEMS

Life on Earth

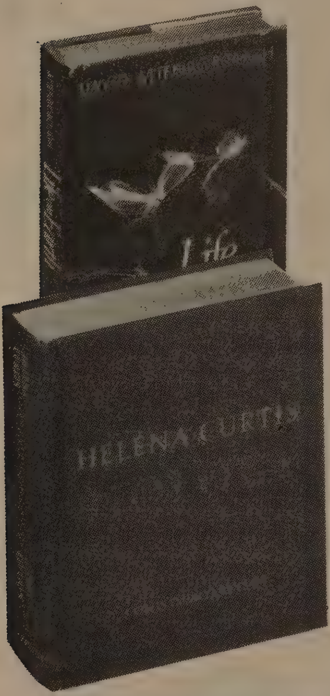
Biology

Watching Attenborough's current TV series **Life on Earth** *reminded me that despite the shining examples of peyote Indians and Zen Buddhists, I still get the majority of my religion — feeling and practice — from biology. And I still get the majority of my sense of how the world really works — the insights that deepen with experience — from biology.*

As proselytizer then, let me recommend these two texts as preeminent introductory and advanced entrees into the big-picture Presence of what it means to be alive. **Life on Earth** *is the book from the 13-week series. Lots of books have gorgeous pix like this one; almost none have gorgeous pix embedded in gorgeous understanding like here.* **Biology** *was urged on me by Phil Morrison, universal book reviewer for* **Scientific American**, *as the finest (fittest?) of dozens of general biology texts fighting for the college market. He's right; for clarity, comprehensiveness, and currency in a rapidly moving field, this volume fills the bill.*

I mean, the niche.

Are biological metaphors proliferating, and is that good? Yes, yes. —*Stewart Brand*



Life on Earth
David Attenborough
1981; 319 pp.

$22.50 postpaid from:
Little, Brown
and Company
200 West Street
Waltham, MA 02154
or Whole Earth
Household Store

Biology
Helena Curtis
1979; 1067 pp.
3rd Edition

$23.95 postpaid from:
H.S. Worth Company
P.O. Box 601
Oakridge, OR 97463

Darwin accurately predicted the discovery of an insect with a tongue 28 centimeters long in Madagascar, because this length would be required to reach the nectar of a species of orchid that blooms there. A similar, though slightly less startling, relationship exists between the sphinx moth and the tobacco blossom shown here.
—Biology

Queen termite surrounded by her workers
—Life on Earth

•

The insects colonised the land before the vertebrates and they still exploit every organism on it. There is no known species of plant that is not attacked in one way or another by them. In some parts of Africa, they regularly claim three-quarters of all the crops grown by man. Even in the United States where farmers have the most sophisticated means of protecting their crops, insects claim over ten percent of them. The boll weevil infests cotton fields and millionaires go bankrupt. The Colorado beetle spreads over a potato crop and a human population starves. Not only do insects rob man of his food, but they suck his blood, bury themselves in his skin and infect him with all kinds of serious diseases. He, in retaliation, has launched against them the most concentrated onslaughts that he has been able to devise. He attacks them with flamethrowers. He bombards male insects with radioactive particles to sterilise them and then releases them in huge numbers, so condemning generations of females to infertility. He synthesises new chemical poisons of the most lethal kind and sprays the countryside wholesale. And yet, in spite of all his efforts and ingenuity, of huge expenditures of labour and money, he has so far failed to exterminate a single insect species. **—Life on Earth**

Symbiosis in Cell Evolution

If you liked Prince Peter Kropotkin's **Mutual Aid: A Factor of Evolution** *(***NWEC** *1st Edition, p. 379), published in 1902, you may well love Lynn Margulis' new comprehensive update of her cell symbiosis theory, published in 1981. A few years ago her notion that nucleated cells (eukaryotes) evolved from the cohabitation of a diversity of more primitive cells (prokaryotes) was microbiological heresy. These days it is on the verge of becoming doctrine, revolutionizing the study of microorganisms, with philosophical ripple effects similar to Kropotkin's — survival of the fittest is a tale of cooperation as well as competition.*

Part of the pleasure of travelling with Margulis through the five kingdoms (remember when it used to be only three — plants, animals, and fungi?) is the intricate discovery of the overwhelming role of single-celled organisms in pioneering and maintaining all life. Shortly one feels that to be a human is to be merely a particularly mobile and calculating swamp.

Making this a symbiotic review, here is a bit of the foreword by the exceptionally worthy G.E. Hutchinson lauding the book as "a truly important contribution to the reintegration of our terribly fragmented science into a coherent discipline. Beyond all this, it provides a glimpse of the working of one of the most constructively speculative

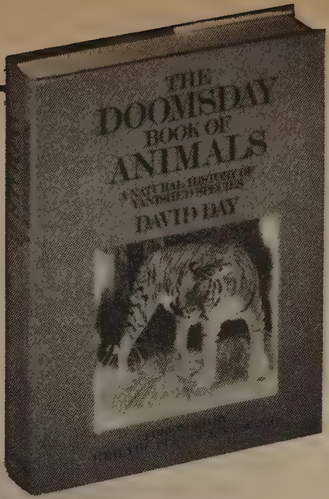
The Doomsday Book of Animals

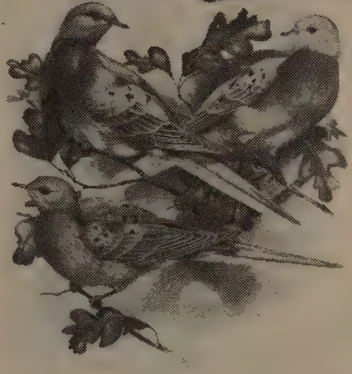
I knew that ghosts of annihilations-past-but-not-learned-from could be fascinating. A famous few — Dodos, Great Auks, Ivory-billed Woodpeckers, Passenger Pigeons, Carolina Parakeets, Steller's Sea Cows, Barbary Lions, and California Grizzlies — proved that. I also knew that the subject could be a depressive abyss, and approached this book warily. Then I saw the strikingly beautiful, zoologically faithful color illustrations (befitting a natural history designed and printed in London) and immediately became engrossed.

David Day avoids undercutting the power of the facts with impassioned rhetoric. His meticulously researched accounts of nearly three hundred extinct species and races are written with careful, spellbinding eloquence. Severely endangered species are included both within the text and on the appended taxonomic list. All but a few of these diverse vertebrate genotypes were still walking/flying/swimming around in 1680. Humans caused virtually every disappearance.

The Doomsday Book *teaches compelling ecology and complements Paul and Anne Ehrlich's* **Extinction** *(***NWEC** *p. 48). It also exemplifies a spirited intelligence that may change our growthmanic ways enough to protect the habitats of Giant Sable Antelopes, Sumatran Rhinoceri, Mediterranean Monk Seals, Lion-tailed Macaques, Hairy-eared Mouse Lemurs, Maroon-fronted Parrots, Madagascar Fish Eagles, Shortnose Sturgeons, and Santa Cruz Long-toed Salamanders.* —*Ben Campbell*

The Doomsday Book of Animals
(A Natural History
of Vanished Species)
David Day
1981; 287 pp.
$40.75 postpaid from:
Viking Press
299 Murray Hill Parkway
East Rutherford,
NJ 07073
or Whole Earth
Household Store


THE DOOMSDAY BOOK OF ANIMALS
A NATURAL HISTORY OF VANISHED SPECIES
DAVID DAY



Passenger Pigeon Ectopistes migratorius **Extinct c. 1914**

•

As the Elephant Bird of Madagascar was without doubt the largest bird ever to live, the Passenger Pigeon or Migrating Dove was the most numerous. As late as 1860 any naturalist or layman might easily have argued that the Passenger Pigeon was, in biological terms, the most successful species of bird on earth. Its numbers were so great, its territories so vast, and its strong body so well designed for its needs and habitat, that it is almost incredible that it could have been exterminated within the short space of 50 years.

No one knows how many Passenger Pigeons there were, but it has been estimated that they accounted for nearly 40 percent of the entire bird population of North America. In 1870, when their numbers were considerably diminished by relentless hunting, a single flock 1.6km (one mile) wide and 510km (320 miles) long, containing not less than 2000 million birds, passed over Cincinnati on the Ohio River. . . .

The demand for these birds was phenomenal. Adult birds were the cheapest meat that could be bought; the squabs were a tender delicacy. The gizzards, entrails, blood and even dung were marketed as medical cures for gallstones, stomach aches, dysentery, colic, infected eyes, fever and epilepsy. Pigeon down and feathers were used for pillows and quilts. There was also a large market for live birds. Sportsmen who indulged in trapshooting bought up perhaps a million birds a year. A shooting club for a week's competition might bring in 50,000 birds, nearly all of which would die either by being shot or having their wings or necks broken by being hurled from the catapult traps. One sporting gentlemen might kill 500 or more of these birds in a day's shooting. . . .

By 1896 there were only 250,000 Passenger Pigeons left. They came together in one last great nesting flock in April of that year outside Bowling Green, Ohio, in the forest on Green River near Mammoth Cave. The telegraph lines notified the hunters and the railways brought them in from all parts. The result was devastating — 200,000 carcasses were taken, another 40,000 were mutilated and wasted. 100,000 newborn chicks not yet at the squab state and thus not worth taking were destroyed or abandoned to predators in their nests. Perhaps 5000 birds escaped.

The entire kill of this hunt was to be shipped in boxcars to markets in the east, but there was a derailment on the line on the day of the shipping. The dead birds packed in the boxcars soon began to putrify under a hot sun. The diligent hunters' efforts were wasted: the rotting carcasses of all 200,000 birds were dumped into a deep ravine a few miles from the railway loading depot.

On 24 March 1900 in Pike County, Ohio, the last Passenger Pigeon seen in the wild was shot by a young boy. On 1 September 1914 in the Cincinnati Zoo, 'Martha' — a Passenger Pigeon born in captivity — died at 29 years of age. She was the last of her species. The impossible deed was done.

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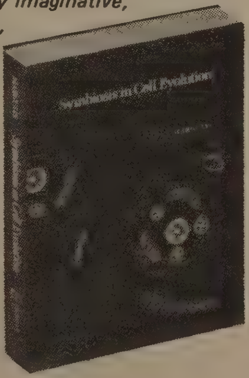
minds, immensely learned, highly imaginative, and occasionally a little naughty, that is now engaged in the study of great problems posed by living organisms."
—*Stewart Brand*



Symbiosis in Cell Evolution
Lynn Margulis
1981; 442 pp.
$14.95 postpaid from:
W.H. Freeman and Company
660 Market Street
San Francisco, CA 94104
or Whole Earth
Household Store

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Symbiosis has affected the course of evolution as profoundly as biparental sex has. From an evolutionary point of view, they are analogous: they both entail the formation of new individuals that carry genes from more than a single parent.

•

Species diversity, as seen in the Gaian context of the necessity for atmospheric control, is not a luxury. Millions of different species are a necessity for the maintenance of flexibility, responsiveness, and redundancy in the face of the inevitable astronomical and geographical perturbations of conditions on the planet.

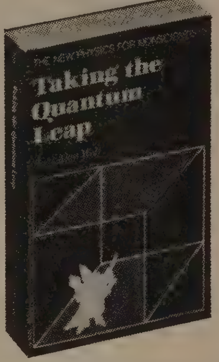
Taking the Quantum Leap

The back of the book says: "...makes modern theoretical physics accessible to the general reader." And, friends, it does! I've been waiting for someone to do this for a long time. (My modern-physics book had no mention of quantum mechanics, solid state physics, or any of the Hot Items infesting science magazines these days). Better get on it before we get left out, right? So where do we start? I'd suggest right here. Many of the intricate jargony terms you note in articles you can't read are here untangled and even made amusing. Oh, you won't be able to put the book down and apply for a scholarship to MIT, but you'll not be a total dumb-dumb anymore either. At least not to your nonscientist friends. I'd say this is the most easily understood presentation of this material I've seen. That is, I could handle it without slowly becoming maddened.

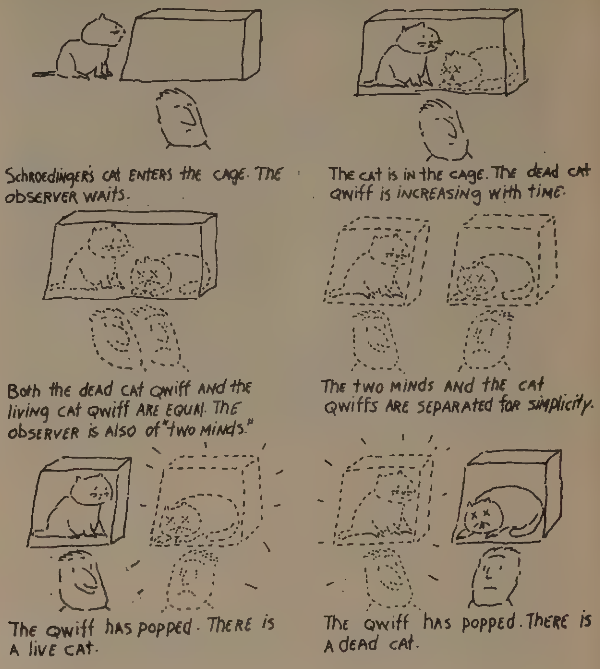
—J. Baldwin

Taking the Quantum Leap
(The New Physics for Nonscientists)
Fred Alan Wolf
1981; 262 pp.

$11 postpaid from:
Harper and Row
Mail Order Department
10 East 53rd Street
New York, NY 10022
or Whole Earth Household Store



The possible adventures of Schroedinger's cat and the observer.



Schroedinger's cat enters the cage. The observer waits.

The cat is in the cage. The dead cat qwiff is increasing with time.

Both the dead cat qwiff and the living cat qwiff are equal. The observer is also of "two minds."

The two minds and the cat qwiffs are separated for simplicity.

The qwiff has popped. There is a live cat.

The qwiff has popped. There is a dead cat.

■

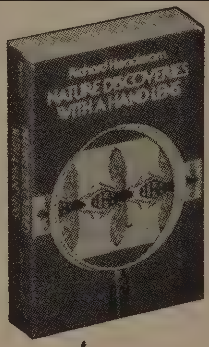
I shall call the quantum wave function a "qwiff." Think of a qwiff as spreading throughout space like ripples on the surface of a pond. I will also call the act of observation a qwiff "pop." Thus qwiffs "flow" and qwiffs "pop." Qwiffs flow like moving, undulating waves of water. Qwiffs pop like bubbles in a stream. But I want the reader to imagine that a qwiff pop is a destruction of a qwiff flow. In other words, when the qwiff pops, the qwiff itself vanishes. When a correlation exists between two particles, it is like a qwiff rubber band stretched between them. The observation of one of the particles pops the qwiff and instantly affects the other.

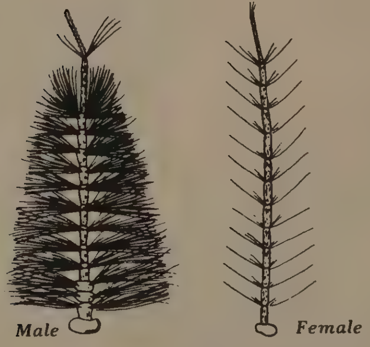
Nature Discoveries with a Hand Lens

Every teacher of natural history should have this book and all self-taught naturalists (like myself) will delight in it. It's geared to the northeast deciduous forest (you know, the summer-fall-winter-spring community). The language carefully bridges folkways to techno-lingo. Another fine Dover publication. *—Peter Warshall*

Nature Discoveries with a Hand Lens
Richard Headstrom
1981; 438 pp.

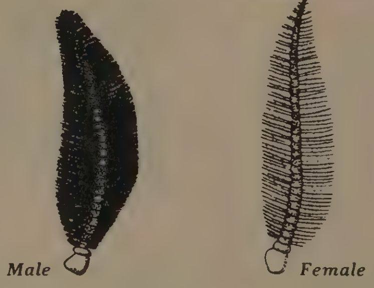
$6.75 postpaid from:
Dover Books
180 Varick Street
New York, NY 10014
or Whole Earth Household Store





N

ANTENNAE OF MOSQUITO



M

ANTENNAE OF CECROPIA MOTH

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On comparing the antennae of the male and female cecropia moth (Fig. M) and the male and female mosquito (Fig. N), you will find that the antennae of the male moth are larger and more feathered than those of the female and that the antennae of the male mosquito have a larger number of long, slender fibrillae than those of the female. The reason for such differences is that the antennae of the male moth function as organs of smell, and the antennae of the male mosquito function as organs of hearing, the delicate fibrillae of various lengths being sent into sympathetic vibrations by the note of the female. The object in both instances is to bring the sexes together.

Joy of Man's Desiring

Reading **Joy of Man's Desiring** *is like acquiring eyes in your genitals. Subtle, transparent, haunting, the story is about people in a stark, high plateau community reconnecting with the natural world around them and consequently with the simple and fine sexual energy in and among themselves.* **Joy** *is translated from the French — from France's "back-to-nature" period of early this century.*

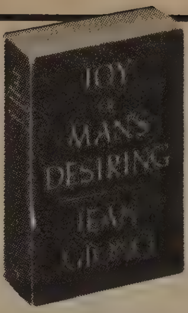
Breathtaking images and events: a young teenage girl falls in love with a stag, follows him around, sleeps outside his barn door. The hero, Bobi, who brought the stag and the general sensual awakening to the plateau, inspired the farmers to plant narcissi rather than more oats than they need to eat; they feed excess stored oats to the wild birds, who come in huge numbers to eat, birds which have never been seen on the plateau.

The heart of this book has no sentimentality, and the sex no violence; the mind is so finely tuned as to be invisible. The final events of the story leave one's newly sensitized awareness painfully confronting the failure of human love — but it "hurts good." —Alia Johnson

Incidentally, Giono is the author of "The Man Who Planted Trees and Grew Happiness," the much reprinted story we reprinted in **The Next Whole Earth Catalog** *(p. 78).*
—Stewart Brand

Joy of Man's Desiring
Jean Giono
1980; 464 pp.

$9.50 postpaid from
North Point Press
850 Talvot Avenue
Berkeley, CA 94706
or Whole Earth
Household Store



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"Everything makes you wish for something," said Josephine.

"Are you talking about restlessness or about always wishing for something?" said Marthe.

"You have nothing," said Josephine, "you get something, then it goes."

"The taste remains."

"Regret."

"That burns hotter and hotter within us. I am not arguing against you, Josephine, I am saying the same thing as you."

"Time is passing. The present goes, everything goes. I am thirty-two years old."

"I am almost twice that."

"In ten years it will all be over."

"I am almost twice that, and when you say all is over it isn't true."

"What is left?"

"Desire, Josephine. . . ."

Indian Running

If you're an Indian appreciator or a running appreciator, you'll come to appreciate Indians as astounding athletes of the landscape and running as a powerful spiritual practice. Nabokov's book is expanded from the **CQ** *cover story he coauthored with Margaret MacLean for Summer 1980. Among other additions, all the anthropology is now sprinkled around Nabokov's account of the 1980 Tricentennial Run (Taos to Hopi, 375 miles) commemorating the 1680 Pueblo Indian revolt. —Stewart Brand*

Indian Running
Peter Nabokov
1981; 208 pp.
$8.95 postpaid from:
Capra Press
P.O. Box 2068
Santa Barbara, CA 93120
or Whole Earth
Household Store

INDIAN
RUNNING

•

Restricting Indian races to a single meaning or motivation is especially difficult for the most exotic track event of all, the "log running" of eastern Brazil. From the Payacú people in the south to the Araparýtiua near the mouth of the Amazon, over twenty Ge-speaking tribes have performed this pageant sport since origin times, and Westerners have chronicled it from the sixteenth century through today. Along the Tocantins River, the Krahō Indians claim that their ancestors, the sun and moon, invented the semi-religious game to play among themselves, and then passed it on to their human children.

Along roads hacked from the wilderness teams of relay runners toting logs that weigh from 100 to 200 pounds compete in races that climax in the spoke-patterned plazas of their thatch-roofed villages. The tracks extend in the four cardinal directions and are wide as country roads. Repaired every five years or so, some extend ten miles into the bush. Competing teams are made up of males from fifteen to fifty-five years old, although during role reversal ceremonies, women carry the men's logs and women's tumpline baskets hang from the men's foreheads.

The Snake-Antelope Dance runners of the Hopi. As they begin to scramble up the sheer side of the mesa, they keep passing the gourd of sacred water ahead to the front runner.

Pagans know where at

The "Where You At?" quiz on page one of the last issue of **CQ** *("Bioregions") posed such questions as "How many days till the moon is full?" and "Name five resident and five migratory birds in your area." This letter claims generic success with the questions. (Also see p. 97 for an urban version of the quiz.) —Stewart Brand*

. . . I really enjoyed reading [the Bioregions issue] for two reasons. The first is involved with my own cultural background which is Rom (gypsy) and Alsatian, two races which have been stomped on by border and governmental bullshit for quite a while. We have survived only by living our lives as closely to the way our ancestors did as possible. This does lead to following — or at least remembering — some rather odd taboos, but our roots remain strong.

Anyway, to get to the point of this letter, I also follow my family's religion. We call ourselves Pagans — from Pagani (living on the land).

As I took the quiz on page one I realized how this old religion fits into a modern life. We teach an awareness of natural cycles, i.e. plants, wildlife, the moon. My Pagan friends and family did 75 percent better than non-Pagans who took the quiz! . . .

Michele Delio
Staten Island, New York

the seven tomorrows crib sheet

by Paul Hawken

Illustrated by Dan Welch

Perhaps a new form of writing here. Often books grow from magazine articles. And often magazine articles are excerpted from soon-to-be-published books. Why not occasionally have an article that really condenses a new book, extracts its essence in an intense couple of pages? Then you don't have to spend $6.95 and four hours on the book. Or, if you're sufficiently intrigued, you can read the book well motivated and prepared to use its details.

Best if such condensation is done by the original author(s). In this case CQ's house economist, Paul Hawken, summarizes a work authored jointly with Jay Ogilvy (the young philosopher who wrote ***Many Dimensional Man****, NWEC p. 378) and Peter Schwartz (radical futurist at SRI International who now is moving on to chief planning officer at Royal Dutch Shell, London). One important element in the book, removed here and completely lacking in most futurist books, is an abundance of dramatic detail, making the scenarios believable and gripping, as if written by a good novelist. Novels, despite* ***Reader's Digest****'s best efforts, don't condense so well. Maybe if the ideas here interest you, a reading of the book will deepen interest into belief and belief into behavior, which is the whole point. The book was almost called* ***Toward a Voluntary History****.*

—Stewart Brand

THE MAJOR determinant of our lives over the next decades will be values, a factor which has been completely overlooked by futurists but over which we as individuals have the most control. A number of books issued recently purport to reveal what lies ahead. Some futures, such as those of Herman Kahn[1] and Alvin Toffler,[2] are cast in the glow of a technocratic sheen, while others, such as **Global 2000**,[3] are darkly foreboding. These and most other futurist books rely upon the projection of existing events and trends and assume that during our darkest or brightest days we will remain firmly rooted in extant value systems. Unstated but implicit in all such futures is the assumption that individual actions have little consequence on history.

It seems that any attempt to draw a singular future is a means to create a dominant mode of thought and, in the end, domination. This domination can be ecological, militaristic, sociopolitical, or technocratic. At the Lindisfarne conference at Green Gulch Farm in 1981, James Lovelock said that the Victorian penchant for men to define women as weak was merely an excuse for cultural repression. Similarly, as soon as we allow optimists or pessimists their repressive simplicity, we relieve ourselves of the complex options that exist for us, unacted upon and still open. The ability to invent and choose is the capacity to be human. Despite the lulling rationalizations of historical determinists, we are making history up as we go along, and any retreat to a single future is to be less than human, less even than instinctual. Doom paralyzes, and naive hope makes action unnecessary. It is between those poles that our choices lie and the capacity to exercise freedom rests.

Seven Tomorrows is an attempt to describe futures that result from our choices and values. In that light the coauthors identified the "driving trends" that will have the most profound effect on our future in the near term and from those that seemed most important created seven scenarios. Although there are hundreds of relevant variables, four seemed most critical on the short term: food, energy, climate, and the economy. The fifth driving trend, against which the others are arrayed, is human values. In the diagram the seven scenarios are laid out to show the relationship between values and the first

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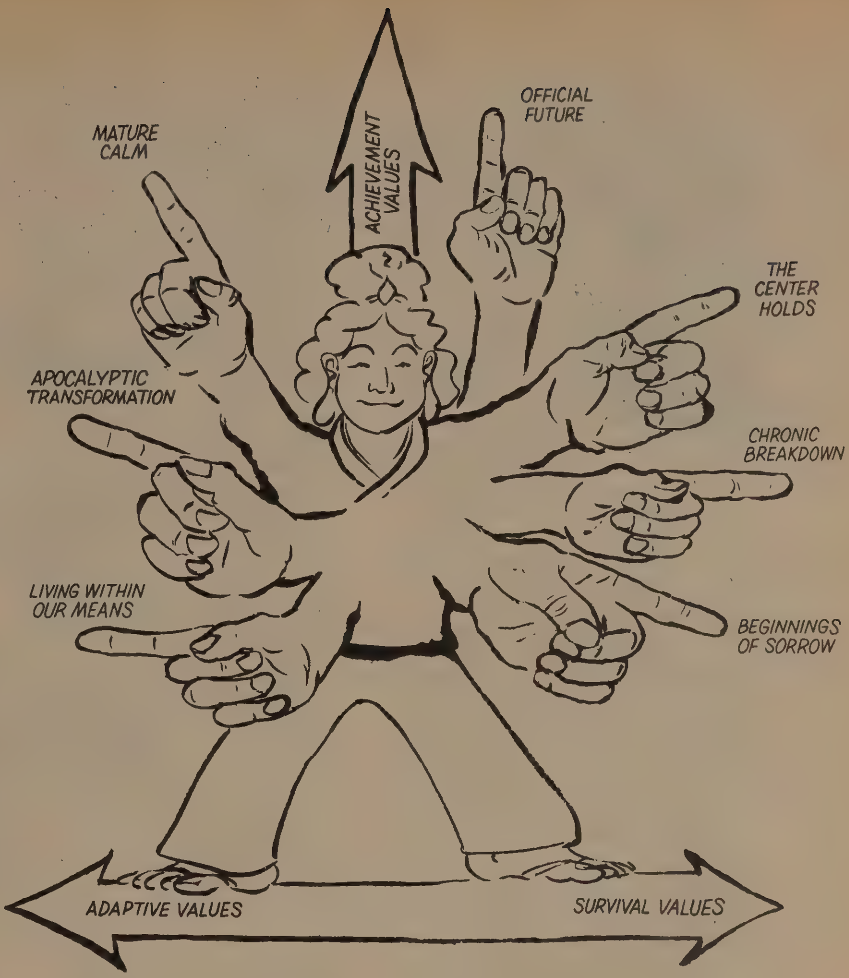
1. **The Next 200 Years: A Scenario for America and the World**, by Herman Kahn, William Brown, and Leon Martel (1976; $6.95 postpaid from William Morrow and Company, Wilmor Warehouse, 6 Henderson Drive, West Caldwell, NJ 07006; **NWEC** p. 35).
2. **The Third Wave**, by Alvin Toffler (1980; $5.20 from Bantam Books, 414 East Golf Road, Des Plaines, IL 60016).
3. **Global Two Thousand Report to the President of the U.S. Entering the 21st Century: The Summary Report — Special Edition with Environmental Projections and the Government's Global Model, Volume I**, Gerald O. Barney, Editor (1980; $9.50 postpaid from Pergamon Press, Maxwell House, Fairview Park, Elmsford, NY 10523).

four driving trends. It is, like any projection, an artifice. But it attempts to show that given the same driving trends and depending on how our values systems skew from the present dominant value system, two very different futures can occur.

It is important to understand that there exists, tacitly but powerfully, a prescribed future on which most if not all governmental and corporate planning in the United States is based: the Official Future. It is the wet dream of the Republican Party, of Rotarians, of corporate directors and cozy institutions. The Official Future promises more of what we supposedly want – money, power, material goods, affluence, position, status, and control – and less of what we don't want – uncertainty, poverty, ambiguity, change, and loss of control. As the embedded strategy of the bulk of our legislation and policy, the Official Future informs most of our institutional activity and is itself informed by the value system of Achievement. Achievement values emphasize and are derived from tendencies which can be described as mechanistic, individualistic, secular, centralized, hierarchical, patriarchal, scientistic, and empirical. For these values and the Official Future to be manifest, a complex set of preconditions must exist or be restored. Some of them are: homogenization of social values, a peaceful world led by American dominance, abundant supplies of low-cost energy, a reduction of burdensome debt, a new baby bulge, robust economic growth, benign global weather, slowing population growth in less-developed countries (LDCs), and a radical lessening of crime. It is an unlikely list, yet for the fantasies of the Official Future to happen, most of these conditions must exist.

If an event should occur that shatters the expectation of such a future, values could either skew in two directions simultaneously or skew dominantly to one side or the other. One direction is toward Survival values, a movement which already has strong impetus.



Survival values are created when Achievers think they won't get their cookies. Their love of the system turns to loathing, and in their attempt to escape the collapse of industrial society, they create an even more virulent form of its absurdities – heavily armed and well-stocked encampments of dead food and fearful people. If the major driving trends worsen and there is a shift toward Survival values, we will see the futures that are on the right-hand side of the diagram.

A different response to a world that changes more quickly and radically than dogma predicts would be an Adaptive value system, where the populace tries to recreate modes of living and interchange that will simply work. Adaptive values also have strong impetus in our culture, but they are seen as weakness since they are more reflective, feminine, naturalistic, and decentralist. The scenarios that adaptive values imply are shown on the left-hand side of the diagram.

Given these three value systems, and the possibility that the four driving trends may range from the benign to the impossible, there are seven basic, almost archetypal, scenarios that are possible.

THE OFFICIAL FUTURE. It is at least *conceivable* that the Republicans are right. Good times are just around the corner. On the wings of technological brilliance we enter another two decades of vigorous growth and bursting pocketbooks. Satisfaction smothers dissent, and smugness replaces concern. The quality of life is one which is simply undreamt of now, and the slow-starters and "infidels" of the seventies find themselves left in the dust of technological resurgence and awesome affluence. Amid the growth is accepted the detritus of broken families, an underclass, and rising crime as an unavoidable "cost" of civilization. Herman Kahn is this scenario's predictor, and he rightly points out that its major obstacle is affluence itself

Seven Tomorrows
(Seven Scenarios for the Eighties and Nineties)
Paul Hawken, James Ogilvy, and Peter Schwartz
1982; 237 pp.

$8.20
postpaid from:
Bantam Books
414 East Golf Rd.
Des Plaines, IL 60016
or Whole Earth Household Store

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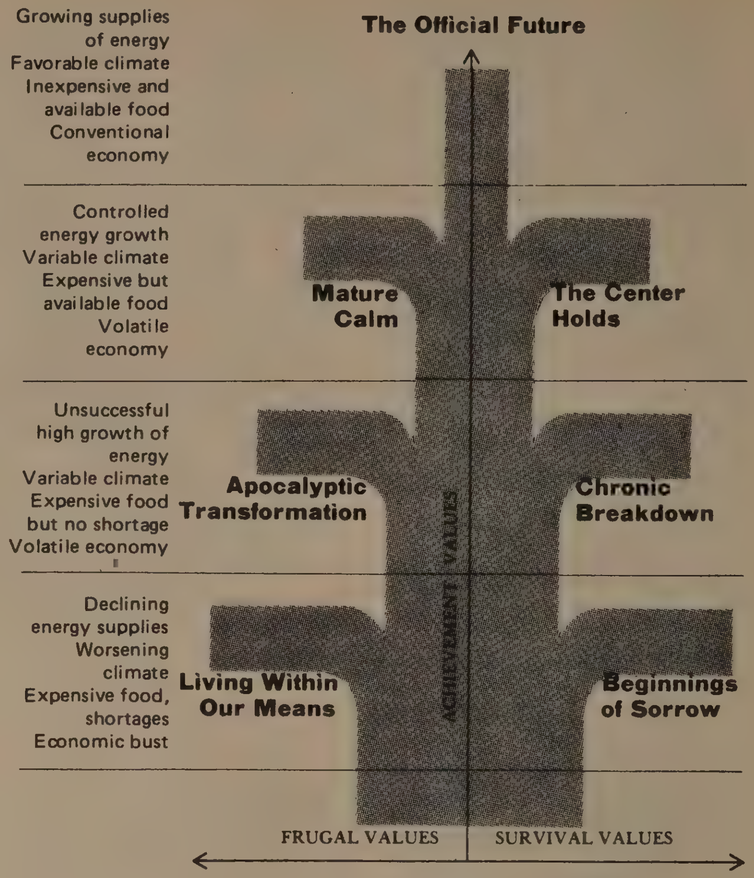
People's inability to look ahead with hope had the effect of releasing ever greater waves of nostalgia. The simple pleasures of the sixties and seventies became the raw materials for a minor industry engaged in mining the past for the pleasures of the eighties and nineties. What had been the background noise of the earlier decades became the forefront of a new branch of entertainment: the packaging of the past. With the aid of long-playing discs and tapes, record stores sold whole days of radio and TV broadcasting from the "Sunshine Decades," as the fifties through the seventies came to be called. People bought week-long blocks of network broadcasting with all the news and the ads, together with the shows. While hanging around home, they bathed themselves in the mediated sunlight of America's high classical era of innocence.


Growing supplies of energy
Favorable climate
Inexpensive and available food
Conventional economy
The Official Future
Controlled energy growth
Variable climate
Expensive but available food
Volatile economy
Mature Calm
The Center Holds
Unsuccessful high growth of energy
Variable climate
Expensive food but no shortage
Volatile economy
Apocalyptic Transformation
Chronic Breakdown
Declining energy supplies
Worsening climate
Expensive food, shortages
Economic bust
Living Within Our Means
Beginnings of Sorrow
ACHIEVEMENT VALUES
FRUGAL VALUES
SURVIVAL VALUES

The Seven Scenarios: Tracks Plotted Against Value Orientations and Differing States of the Other Driving Trends

— its boredom, ennui, and lack of incentives.

The current budgetary quagmire that the Reagan administration finds itself in ensures that the Official Future will not occur in the near future. Which leads to two other possible futures.

MATURE CALM is making the best of the situation. Here, a conservative federal government pulls back on its handouts to the states and localities, and a fiercer regional polity emerges. The feds' devil-take-the-hindmost attitude restores local politics, encouraging vigorous participation in school boards, city councils, and county commissions. The wobbly and anemic economy forces people to shift from being consumers to being producers, particularly around home, where they have the most control.

The opposite reaction is called the *CENTER HOLDS*. Here, the federal government becomes more authoritarian and centralized. Power is tightly held. As the trends of the economy and world events undermine stated policies, scapegoating and demagoguery emerge. Conformity becomes the passport to the growing oligopoly of monied interests controlling Washington. Dissent is crushed. The First Amendment is reinterpreted by a packed Supreme Court, and actions are once again labeled as "un-American." Fear devolves into the need for control. America hangs together well enough, but at great expense to its pluralistic roots.

Should this scenario devolve even further, there would be *CHRONIC BREAKDOWN*, what might be called a failed "sovietization." As the U.S.S.R. demonstrates, controls that are too tight drain the blood from societal muscle. If energy resources become scarce or the economy and the global climate turn stormy, producing both inflation and food shortages, the world may very well find its patience gone and its temper heated. America's complex and energy-dependent systems would quickly erode into something akin to the British phone system. Things would work, but just barely. Services would be poor, prices high, wages low, and jobs scarce. A struggle against entropy would appear to be a creeping decay. Hope might be lost, the idea of progress painfully distant, and most would accept their fate as keeping abreast with the incurable.

The scenario which is least likely of all, given human nature and the slow rate of social change, is *APOCALYPTIC TRANSFORMATION*. It speculates that human transformation is possible in the short term only if there is a massive shock to the social system. The deterioration of *CHRONIC BREAKDOWN* when combined with a palpable sense of impending nuclear war seems, unfortunately, to be the only type of situation which would be intense enough for people to make deep self-reflection. Just as persons who have had massive heart attacks often emerge with a previously unknown appreciation of life, it may require a wrenching away of the national hubris to bring us insightfully to our knees.

The final two scenarios deal with the "worst case" set of driving trends. The first, *BEGINNINGS OF SORROW*, is thoroughly dominated by survivalists. It is how the world might appear if their hopes come true. It is the worst future short of nuclear war, a failure of nerve in which the national fabric is shredded by the onslaught of events. Children are abandoned; money consists of antibiotics, teeth fillings, and silverware. There is no economy. A nation simply goes mad.

Its opposite is *LIVING WITHIN OUR MEANS*. Here the citizenry faces the same plague of problems and responds with a surprising willingness to relent, forgive, change, and share. The first blackout in New York produced altruism and a sense of shared condition. The second blackout produced anarchy, robbery, and looting.

LIVING WITHIN OUR MEANS assumes the former response and trusts the people will discover in hardship that frugality, conviviality, and cooperation are the best hope for survival.

There are endless other futures that one could imagine. The purpose of outlining these seven is not to suggest that any are likely. More probably, our future will be an amalgam of all in different degrees, places, and times. The real purpose of looking ahead is to better see what informs the present. Underlying **Seven Tomorrows** are four assumptions about deeper structural changes that are occurring within the culture, changes far more endemic than trends.

Our first assumption is susceptibility to the improbable. For too long authors have discounted everything but the likely in futures forcasting and national planning. This is rational but it is not true to our experience as a nation. If we look back on the past 20 years, we find severe discontinuities and shocks to the system caused by highly improbable events, from the Kennedy assassination to Three Mile Island – "wild cards" which have altered the course of history dramatically. Truly rational planning would assume that, over the course of time, such events have a high probability. Futures projections which exclude them are so sanitized that they are the least probable scenarios of all. The point of including wild-card events as probable is that they require systems to be more resilient and have more overlapping pathways to cushion such shocks. Without such considerations, we will have an ossified and moribund weltanschauung that will be unable to cope conceptually or actually with real events.

The second assumption that informs these scenarios is that power is ebbing from central sources of control. This thesis was brilliantly and originally put forth in James Ogilvy's **Many Dimensional Man.**[4] Just as Nietzsche's pronouncement of the death of God indicated the beginning of the secular society, it can be said that the imperial presidency has joined God's demise and that hierarchical structures of power are near their end. If we define power as the ability of a few people to bring about large scale destruction, then power is indeed highly centralized. But power so defined is not the power we seek as individuals and societies. If we define power as the capacity to carry out reasoned intention, as opposed to the exercise of brute force, then we must look extremely hard to find the true loci of power in America. Rather than shifting from one group to another, power may very well have slipped away entirely, like water through a sieve, leaving us with its residual illusions but none of its capacities. This makes the seemingly inconsequential action of the individual the true locus of power. Yet what we still see is institutions acting as if they wield power and individuals acting as if they will never get it, a drama which may very well be the opposite of what is true.

Our third assumption is that what power exists is exercised within a new environment. Institutions that once acted out our reasoned intentions may now represent obstacles to those same intentions. Educational institutions stymie true learning, hospitals prevent health, corporations impoverish us by environmental degradation. We may wish to dismantle those institutions, but what is happening instead is that they are forming a neo-wilderness of their own. As denizens in this fierce terrain of manmade mountains and valleys, we are learning yet another environmental ethic. Institutional paralysis means that we cannot easily move mountains. A rational stance becomes one of creating new niches on the slopes. Our power will accrue only as we understand the limits of human control over nature, whether it be old and earthly or new and human wrought.

Lastly, there is a profound change occurring in perceptions and belief systems. Most futures studies assume that human beings change in response to events and that history is based only on factual events, not on changes in perception. And though it would be facile to say, as some do, that such changes in belief systems presage the dawning of a novel age, it is imperative to remember that influence that emanates from the ways in which we perceive the world remains the most powerful force of all. **Seven Tomorrows** tries to show, for better and worse, that ways of seeing ourselves and the world are in the end the major determinant of our life ahead ■

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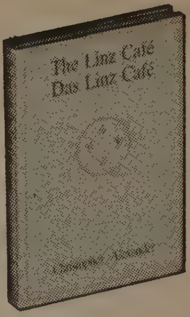
[4] **Many Dimensional Man: Decentralizing Self, Society, and the Sacred**, by James Ogilvy (1977; $7.45 postpaid from Harper and Row, Mail Order Department, 10 East 53rd Street, New York, NY 10022; **NWEC** p. 378).

The Linz Café

Christopher Alexander's books, especially **A Pattern Language** *(***NWEC** *p. 217), ask for demonstration of the ideas presented. The enlightened sponsors of a design exposition offered him a chance to show his stuff in the summer of 1980. He responded with a deceptively simple and subtle cafe. This modest book shares that same spirit with quiet, lucid explanations of what he was trying to achieve, and photographs for those unlucky enough to be unable to stop in for a beer. Judging by this book only (I have not seen the cafe), I'd say the cafe has that charm one finds now and then in a building designed by somebody who has not been messed up by an education in architecture. The designer's love and regard for the people who will use the building shows. It's appalling that this is considered unusual or difficult to achieve, but we live in strange times. I'm glad that Christopher Alexander is alive and well. The book is a sort of gift.* —*J. Baldwin*

●

In order to get each detail to work just right, within the framework of these rough visions, it was of course necessary to work each detail out, very exactly, by trial and error, using full scale mockups to get size and shape and proportion just exactly right. For example, in the case of the alcoves, I spent several hours in the office, playing with chairs, tables, and pieces of plywood, until I had the dimensions of the alcove exactly right. I knew I had it right when it felt so comfortable, that everyone in the office clustered round, sat in the simulated alcove drinking brandy, and refused to leave.



The Linz Café
Christopher Alexander
1981; 94 pp.

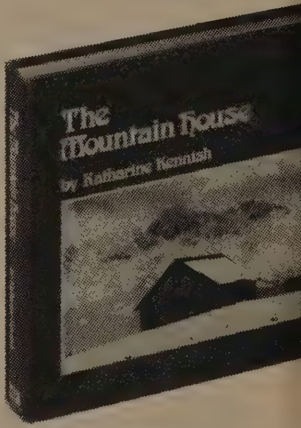
$19.95 postpaid from:
Oxford University Press
16-00 Pollitt Drive
Fair Lawn, NJ 07410
or Whole Earth
Household Store

The Mountain House

How are mountain houses different from flatland houses? This new hardback examines the obvious and not-so-obvious distinctions. It identifies recurring types of mountain houses, traces their histories, and looks at modern forms. Author Katharine Kennish pays particular attention to mountain house roofs which successfully avoid dropping icicles and snow on occupants. Nice details, such as baths and fences, are included. Photographs and drawings are on every page. —*Jeanette Germain*

The Mountain House
Katharine Kennish
1981; 195 pp.

$12.95 postpaid from:
Northwood Institute Press
3225 Cook Street
Midland, MI 48640



A sheep camp; the movable home lived in by sheepherders from early spring through fall, while they take the sheep into the mountains for the summer, then bring them down before winter. Such a wagon contains a wood stove for heat and cooking, a bed, cabinets for food, and other necessities.

Velux roof windows

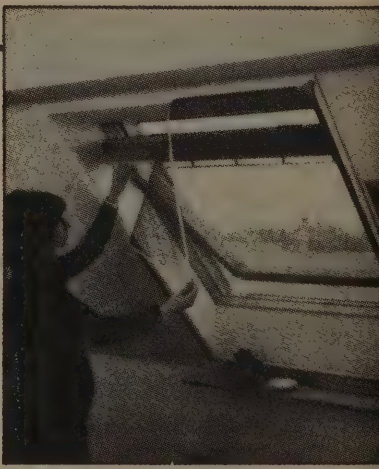
Thanks to four Velux windows we now have a bright, well-ventilated sail loft instead of a dark, stuffy attic. The windows are solidly built (rustproofed metal exterior and mechanism, wood frame), extremely weathertight, and very easy to install.

The Velux window can be set to let in air but not rain, and pivots about its middle to open, the latch operated by a bar that runs the width of the top. So you can put things right in front of the window, you don't have to knock those things over to reach the latch, the window is balanced, so it stays put when you open it, and you can flip it 180° to clean the outside from the inside!

It has many other features, including optional awnings, remote control devices, and triple-glazing. —*Brion Toss*

Velux roof windows
Catalog and nearest
dealer information

free from:
Velux-America
P.O. Box 3208
Greenwood, SC 29646

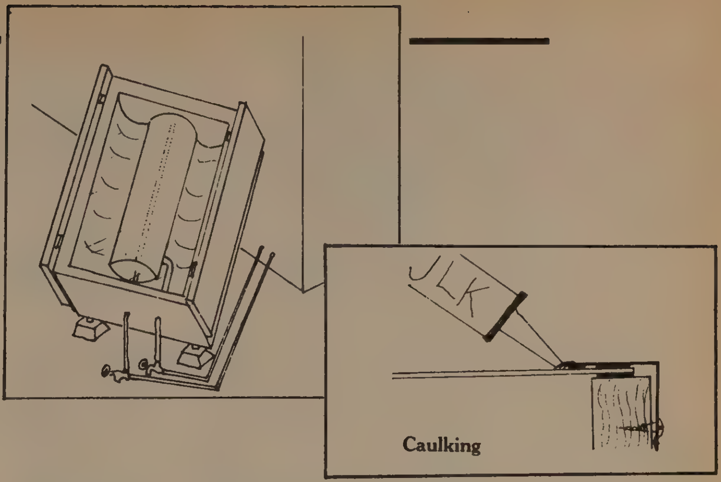


Removable nylon insect screen is fitted with hook and loop fasteners for quick do-it-yourself installation, and easy window operation.

The Integral Passive Solar Water Heater Book

Batch heaters, they're called, and they are the most economical way to heat water with the sun. They're also the easiest for home-builders to home-build. The "batch" is a tank of water painted black contained in an insulated south-glazed box, simply plumbed. That's it. The perennial popularity of Steve Baer's "Breadbox" batch heater plans (still $6 from Zomeworks, Box 712, Albuquerque, NM 87103) is testimony to the grass-roots practicality of the model. With this new book from David Bainbridge (of **The Passive Solar Energy Catalog, NWEC** *p. 188, etc.) you get adaptability added to the design's simplicity — detailed perusal of a variety of working homemade and commercial batch heaters, construction and plumbing techniques, design considerations, sources for materials, etc. J. Baldwin didn't get to review this book because I had glommed it. I'm building a batch heater.* *—Stewart Brand*

The Integral
Passive Solar
Water Heater Book
David A. Bainbridge
1981; 107 pp.
$10.95 postpaid from:
The Passive Solar Institute
P.O. Box 722
Davis, CA 95616
or Whole Earth
Household Store



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The good folks at the innovative Rodale's Research Center (publishers of **Organic Gardening, New Shelter, Bicycling, New Farm**, etc.) have also done some work with IPSWH's. They chose the simplest system with only one 40 gallon (151 l.) tank. This tank sits in an insulated wood box, 54 x 24 x 94 inches (137 x 61 x 239 cm.), with a cusp reflector behind it made with aluminized Mylar on a hardboard form. The heater has 29 sq. ft. (2.7 sq. m.) of 3M's "7410" plastic glazing material.

The heater is plumbed into the feed line to the backup water heater. It has insulated lids which can be shut at night. It is expected the Rodale IPSWH will pay for itself in about six years. The heater itself cost $490, and installation added another $140. Net cost after the Federal tax credit was only $378.

•

The final step is adding the glazing. Handle glass with care. The glass should rest on a bead of silicone caulk, glaziers tape, or foam. Fasten the glazing down and add the flashing to make it waterproof. After all is complete run a bead of silicone seal along joints and connections where the glass meets flashing or battens.

Housing Innovation Handbook

Not only is the sheer volume of energy information stultifying, the sheer number of outfits presenting the information has risen to the point where it is genuinely difficult to find out what the hell is going on. Cecil Cook's ever-expanding collection of briefs is the most useful I've seen, and I wish this enterprise well. Each brief covers one subject — skylights, for instance — and runs perhaps a page or two. That little bit of reading will bring you up to date on the basic skylight bit, give you names and addresses, a bibliography, criticism of various designs and brands of equipment, and results of field experience. Generally I find that the information given is sufficient for the formation of some sort of decision. That's all one can ask. There's a news and update service as well — the news appears quarterly and runs six to eight pages, the update service sends briefs monthly. *—J. Baldwin*

•

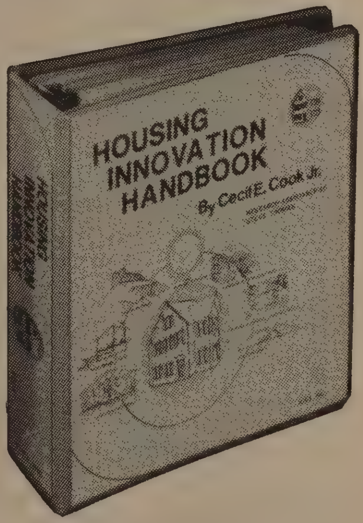
The main benefits of skylights are natural illumination, special lighting effects, heat gain during winter, summer ventilation, opening up tight spaces, additional visual contact with the outdoors, and aesthetic considerations. Significant savings on lighting, heating and cooling bills are possible using skylights intelligently as an integral part of a house's design.

Both fixed and ventilating skylights can be built on-site for about a third the cost of manufactured units by owner-builders and contractors. The HIH favors the use of lower cost site-built skylights because of the potential savings.

Unless shading and insulating devices are built into skylight installations, they will become energy liabilities because they will add to both the heating and cooling bill.

Housing Innovation
Handbook
Cecil E. Cook Jr.
1981; 342 pp.
$26.95 postpaid

Housing Innovation
News and
Update Service
Cecil E. Cook Jr.
$20/year
both from:
ATEX Press
P.O. Box 8264
Columbus, OH 43201



Skylights have a well-known tendency to leak unless they are properly installed and sealed. The expansion/contraction of wood, metal, glass and plastic tend to open up all but the best seals. Flashing is probably the best way to control the problem of leaking skylights.

Acrylic skylights will craze and yellow with age. Tempered glass glazing avoids this problem.

Most ventilating skylights left unattended during an unexpected rainstorm will result in rain penetrating inside the house. Skylights must be occupant-operated.

Bicknell stone working tools

A few months ago I was doing a job that required cutting a lot of granite (I'm a stonemason) and it was giving quite a bit of trouble so I went to see an old tombstone cutter in Durham named John Bost to see if he had any tips for me.

"Son," he beamed as soon as I had explained my difficulty, "I not only know what you need, I know exactly what you need."

He swept me into his faded, peeling, sunlit office and explained over his shoulder as he reached for a tattered catalog and the telephone, "I bought one of these chisels in 1947 and I paid four dollars for it. My boss thought I had gone crazy. I already had a whole pile of the other chisels and he told me, 'You're not going to throw them out.' But I showed him how it would cut. I went right up one side of the stone where I would use one or two chisels and I kept right on going down and around the other three sides and kept on and the thing was like new."

He must have caught the light in my eyes because he just started ordering away to someone on the other end of the line whom he referred to cryptically as the "tool room."

"You'll need a tracer first off and a set, both two and a half," he informed me and the tool room. "And a chisel, seven-eighths and a point. Yes, seven-eighths."

Within a week I had in hand a heavy package from the Bicknell Manufacturing Company containing just what old John had told me I'd get: heavy, expensive, carbide-tipped, lifetime chisels.

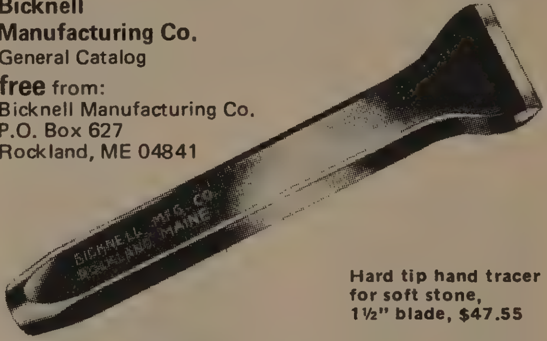
The price averaged about $40 apiece for the four I got. I don't know how that stands up to the ravages of inflation but I believe they're worth it.

Obviously, if you're just planning to do a little underpinning or rock in the garden a brick hammer will suffice. But if you will be dealing with hard stone seriously and continually these are a sound investment.

Bicknell carries a full line of hand tools and pneumatic equipment for cutting, carving, quarrying, dressing, etc. They have a catalog that comes in a nice plastic binder, an 800 phone number, and a prices-on-request policy.

—Joe Kenlan

Bicknell Manufacturing Co.
General Catalog
free from:
Bicknell Manufacturing Co.
P.O. Box 627
Rockland, ME 04841



Hard tip hand tracer for soft stone, 1½" blade, $47.55

Murphy's tool

. . . On **NWEC** page 10 a **Sky and Telescope** excerpt: Points to Ponder #9: "Murphy's laws are merely a set of convenient excuses." Now I could be wrong, but it seems to me that the original Murphy's law, to wit: "Everything that can go wrong will go wrong," can be, and was meant to be a very valuable tool.

When I first came across it (and I have no idea exactly where or when that was), it was before it had become a culture-wide excuse for all the things that go wrong. It was presented, rather, as a serious engineering principle: Anything that can go wrong will, eventually, so design things so they can't go wrong. If you have a cluster of wires, each destined for a particular terminal, cut them to length so that there is only one way to connect them all — the right way, with each just reaching its terminal, etc.

Now this is a serious point. It demands a certain discipline to try and think of all the things that can go wrong with a system, and it sometimes (often? always?) becomes clear that you can't. Some systems are too complex. Some, I would guess, are impossible to design to be faultless — dealing with one problem creates another. Still, you learn by the failures, as evolution does.

If you think about it, it's a sobering point — since you can't think of all the possible failures, some failure you haven't thought of will eventually occur — witness Three Mile Island. So don't go messing with systems that dangerous, unless it is absolutely necessary, and then only with a full appreciation of the eventual end result . . .

Yours,
David Tode Oshin
Portland, Oregon

Lewis Winch and Mole

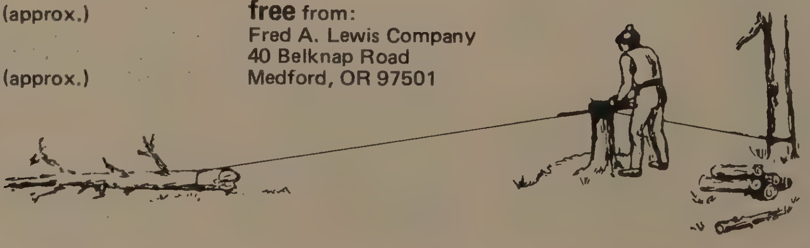
Remove your chain-saw bar and replace it with one of these devices and you have a winch with 250 feet of cable and 8000 pounds of snatching power, or an earth auger that can handle holes up to 9 inches in diameter and 5 feet deep, or a wood drill that can bore a humongous 4-inch diameter hole 30 inches deep. All ball-bearing construction. I haven't seen either at work, but the design appears sound and the advantages seem to be many.

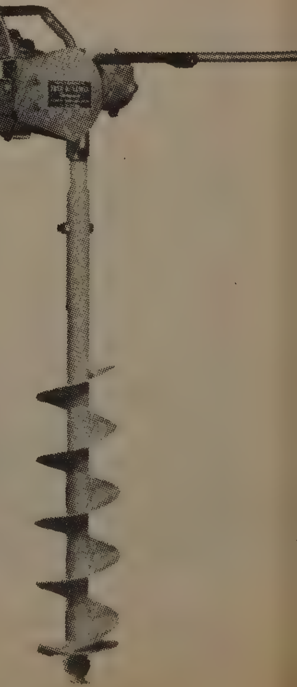
—J. Baldwin

[Suggested by Bruce Michael Lee]

Lewis winch and mole
Winch
$365 (approx.)
Mole
$269 (approx.)

Information
free from:
Fred A. Lewis Company
40 Belknap Road
Medford, OR 97501





How to Design an Independent Power System

Virtually every serious error I've made and seen made in the design and operation of small power systems would have been avoided if this book had been read first. The information isn't new, but having it so neat and easy to use means you're more likely to pay attention. It's written in beginner's language, with emphasis on not kidding oneself. —*J. Baldwin*

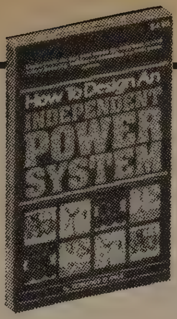
RELATIVE CAPACITY OF LEAD-ACID STORAGE BATTERIES AT NORMAL AND LOW TEMPERATURES

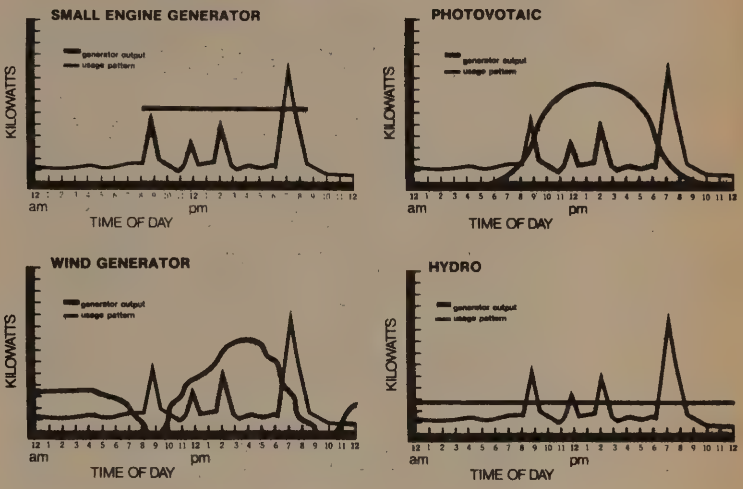
Temperature (F°)	Percentage of Capacity
80°	100%
60	90
40	77
20	63
0	49
-20	35
-40	21
-60	9

●

If the inverter has good surge characteristics and voltage regulation, and low harmonic distortion what you look next for is reliability. The best guide here is to talk to people who have used the particular brands in similar applications. We repeat: *similar applications.* There are expensive inverters around which are good at running computers and sophisticated electronic equipment that do a dreadful job running motors.

How to Design an Independent Power System
Terrance D. Paul
1981; 126 pp.
$4.95 postpaid from:
Best Energy Systems
for Tomorrow
P.O. Box 280
Necedah, WI 54646





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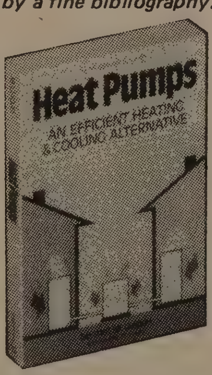
Shown are typical generating (supply) patterns of engine, wind, photovoltaic and hydro generators superimposed on the hourly usage pattern (demand). Obviously *the supply doesn't equal the demand.*

Heat Pumps

"They make more energy than they use." "They break down often." That's about the extent of the heat pump knowledge you're likely to receive as hearsay. You can do a lot better than that with this exceptionally clear explanation. It might well pay you to investigate, because heat pumps do deliver more BTUs than you put into them, and their once well-deserved reputation as troublemakers is no longer well deserved. This is by far the best source of information on heat pumps that I have had the pleasure to see, and should help gain them a wider acceptance. Lots of examples are fortified by a fine bibliography.
—*J. Baldwin*

Heat Pumps
(An Efficient Heating
and Cooling Alternative)
Dermot McGuigan
1981; 202 pp.
$6.95 postpaid from:
Garden Way Publishing
1515 Ferry Road
Charlotte, VT 05545
or Whole Earth
Household Store



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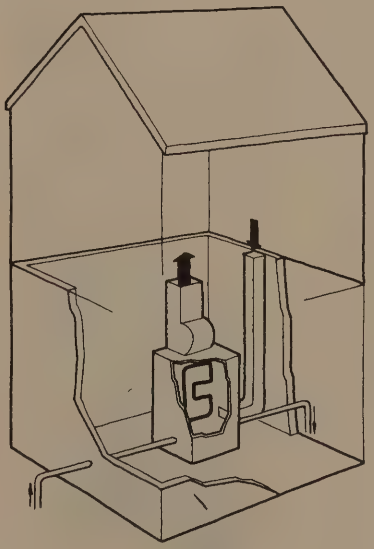
We live in a blanket of low temperature heat energy — in the air, the earth, the water. Much of the time, such as in the summer, that blanket is warm enough so that we don't need additional heat. And even in the winter, the percentage of heat that we need added is very low. For example, even when it is freezing at 32°F., the air contains 91 percent of the energy required to keep us warm at 80°F. All we need to do is to find that extra 9 percent. Here's how that is figured:



Water-to-air system can use lake, river, sea, or well water as a source of heat. Air moves down into plenum, is warmed, and flows back into living area.

$$\frac{\text{Heat at 32°F.}}{\text{Heat at 80°F.}} = \frac{\text{273°K.}}{\text{300°K.}} = 91\%$$

With the usual heating systems, we burn fossil fuels at very high temperatures to get a temperature increase of just a few degrees in the air around us. This involves a great deal of waste since the average domestic burner, gas- or oil-fired, operates at an efficiency of about 50 to 60 percent. And if you heat with electricity, the heating within your home is very efficient, but the generator-distribution system usually has an efficiency of only about 35 percent.

The alternative, the heat pump, takes heat from the blanket around us, upgrades it a few degrees, then releases it in our homes.

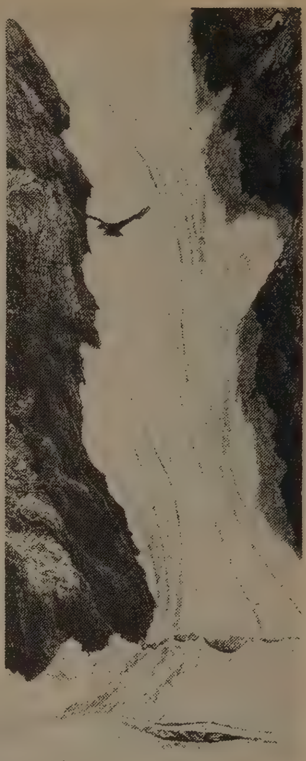
Scrambles Amongst the Alps

This reprint of Whymper's 1871 mountaineering classic is fun to read, enchantingly illustrated, marvelously funny, and above all, a waltz across the peaks in the presence of a startling personality. Whymper is known primarily for being the first person to ascend the Matterhorn at a time when the peak was still suspected of harboring demons; the climb ended with four deaths. But there is more to Whymper than the stereotypes of him suggest. His lively text accounts for everything from fleas to thunderstorms, glaciology to cretinism, and is filled out with over a hundred woodcut engravings, faithfully reproduced per the originals. From armchair enthusiast to hardened expedition cat, this is a story for everybody. —Charles Hood

●

The night passed over without anything worth mention, but we had occasion to observe in the morning an instance of the curious evaporation that is frequently noticeable in the High Alps. On the previous night we had hung up on a knob of rock our mackintosh bag containing five bottles of Rodier's bad wine. In the morning, although the stopper appeared to have been in all night, about four-fifths had evaporated. It was strange: my friends had not taken any, neither had I, and the guides each declared that they had not seen any one touch it. In fact, it was clear that there was no explanation of the phenomenon but in the dryness of the air. Still, it is remarkable that the dryness of the air (or the evaporation of wine) is always greatest when a stranger is in one's party: the dryness caused by the presence of even a single Chamounix porter is sometimes so great that not four-fifths but the entire quantity disappears. For a time I found difficulty in combating this phenomenon, but at last discovered that if I used the wine-flask as a pillow during the night the evaporation was completely stopped.

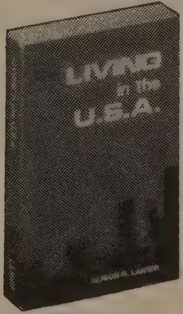
Scrambles Amongst the Alps
Edward Whymper
1981; 164 pp.
$6.45 postpaid from:
Ten Speed Press
P.O. Box 7123
Berkeley, CA 94707
or Whole Earth
Household Store



Living in the U.S.A.

An astonishing book. Though it is written for foreigners planning to travel or work in the U.S. — and serves that purpose splendidly — I would recommend it most strongly to Americans who are planning to travel elsewhere or are expecting to deal routinely with foreign visitors. Americans are very odd. Everybody else is expending considerable effort to treat us as if we were human beings. It is well to know the details of what they are putting up with and, by implication, what is normal for the rest of humanity. —Stewart Brand

Living in the U.S.A.
Alison R. Lanier
1978; 224 pp.
$6.75 postpaid from:
Intercultural Press
70 W. Hubbard Street
Chicago, IL 60610



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Although American informality is well known, many interpret it as a lack of respect when they first encounter it, especially in the business world. The almost immediate use of first names, for example, jars on nerves long accustomed to deference or respect from men of lower rank.

Don't be surprised if Americans do not shake hands. They often just nod or smile instead. A casual "Hi" or "How are you doing?" or "Hello" often takes the place of a formal handshake, but it means the same thing. Nor will you find Americans circulating about a group in the office or at a party giving each one a personal farewell. Instead — again the different sense of timing and pace — they will just wave a cheery "good-by" or say something informal to the whole group such as "Well, see you tomorrow" or "So long everybody." Then they will disappear. No handshakes.

Often you will see men working at office desks in shirtsleeves, sometimes without their ties. They may lean far back in their chairs and even put their feet on the radiator or desk while they talk on the telephone. This also is not meant to be rude. Once we get out of the tense, hurried city streets, we are a loose-jointed, informal, relaxed people.

Our pace is total — either totally hurried, intense, work-absorbed, and competitive (in play as well as work), or else totally at ease, relaxed, "laid back" and informal, our manner breezy. We tend to swing between these extremes. This is the pendulum you need to understand America and its people.

●

Many newcomers to the States will sorely miss the opening courtesies of a business call. They will miss the welcoming tea or coffee that may habitually be served to office visitors in their own country. They may miss leisurely business chats in a cafe or coffee house.

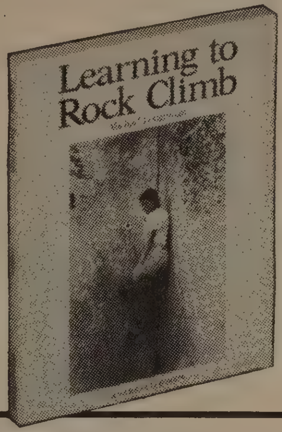
Normally Americans do not assess their visitors in such relaxed surroundings over prolonged small talk; much less do they take them out for dinner, or a round on the golf course, while they develop a pre-business sense of trust and rapport. Rapport to most of us is less important than performance. We seek out credentials of past performance rather than evaluating a business colleague through social courtesies. Since we generally assess and probe professionally rather than socially, we start talking business very quickly.

Most Americans live in time segments by engagement calendars. These calendars may be divided into intervals as short as fifteen minutes. We often "give" a person two or three (or more) segments of our calendar, but in the business world we most always have other appointments following hard on the heels of whatever we are doing. Time is therefore always ticking in our inner ear.

Learning to Rock Climb

It's a few years since I last climbed but this book makes me want to get a new pair of EBs and head for the cliffs. The feel and exhilaration of climbing well are captured so faithfully as to almost overshadow the excellent photographs, diagrams, and descriptions of vital techniques. Safety and use of equipment are covered in fine detail. Climbing ethics are given the attention they deserve (prominent). This book is for all climbers, not just learners. I doubt it will be bettered for a long time, if ever. —*Jonathan Evelegh*

Learning to
Rock Climb
Michael Loughman
1981; 151 pp.
$11.70 postpaid from:
Sierra Club Books
Box 3886
Rincon Annex
San Francisco, CA 94119
or Whole Earth
Household Store



A heel hook used on an overhang. Heel hooks and toe hooks, rarely employed to move upward, are useful when you must reach or lie out far to the side.

●

The difference between a good climber and a great one is the ability to *stop in a tough place* to rest, to work out the next moves, to place the needed protection. In part, this ability results from physical and mental conditioning. Knowledge of the techniques for resting and sheer ingenuity also come into play. . . .

In recent years I have adopted a somewhat unusual form of training. I do boulder problems as slowly as possible. I test how many places I can put one or both hands down at my sides. I lean far to the right and far to the left, stretch high, and crouch low on every hand- and foothold. It is a strange kind of adagio dance, but extraordinary conditioning and very instructive.

Official Airlines Pocket Flight Guide

Last year I was nervously waiting for my Atlanta flight out of New York — I had screwed up my London-to-Atlanta flight standby badly. I had been on a standby list three weeks long.

I noticed something that didn't fit — a confident-looking, well-dressed businessman standing among all the servicemen, college students, and other shoestring travelers waiting to chance the standby. He made it, got the last seat.

I told him I thought it risky to fly standby on the last flight to Atlanta. He said that there were 18 other ways to get to Atlanta that night from New York (on airplanes). You just had to know how. He saved $40 — and he flies several times a week.

How did he do it? He used the **Official Airlines Pocket Flight Guide**. *They list every flight out of every major city, times, and routes. You can plot your own itinerary. Handy. And worth it if you travel several times a month from large airports.* —*Richard Kennedy*

Official Airlines
Pocket Flight Guide
$5 /single issue

$38.92 /year (12 issues)
from:
Official Airlines Guides
2000 Clearwater Drive
Oak Brook, IL 60521

Travel Information by *Walt Noiseux*

These are the guides used by travel agents. They are comprehensive and expensive. Many libraries have them. The listings are complicated, but each guide contains a very good "how to use this book" section. READ IT! Make sure you understand how to use a guide before you plan a trip with it. If you make a mistake, you can cost yourself a lot of time and money.

When you have your plans made, check everything with airlines, railroads, etc. These guides are kept current, but fares and schedules change constantly.

Official Airlines Guide (North American Edition), $95.80/year (12 issues); $119.64/year (24 issues).

Official Airlines Guide (Worldwide Edition), $113.96/year (12 issues).

A "Ground Transportation Services" supplement is included as the second part of the January 1, March 1, May 1, July 1, September 1, and November 1 issues of the semimonthly North American edition only. And the worldwide edition doesn't include North American routes.

Official Airlines Travel Planner and Hotel/Motel Guide (North American Edition), $52.08/year (4 issues).

Official Airlines Travel Planner and Hotel/Motel Guide (European Edition), $51.08/year (4 issues).

These include airport maps, city maps, and schedules of ground transportation from nearest airport(s) to cities without scheduled air service.

All from: Official Airlines Guides, 2000 Clearwater Drive, Oak Brook, IL 60521.

Despite the name, the **Official Railway Guide** *(North American Edition) also contains data on European service. Apparently, there are other editions, but I haven't seen them. Very nice drawings of compartments, roomettes, etc., are included, so you can see what you're paying for.*

Official Railway Guide (North American Passenger Travel Edition), $10/single copy, $56/year (8 issues) from: National Railways Publications, 424 West 33rd Street, New York, NY 10001.

Also useful is:

Russell's Official National Motor Coach Guide, $6.25/single copy, $52/year (12 issues) from: Russell's Guides, P.O. Box 278, Cedar Rapids, IA 52406.

Travel and Tourism *is the best introduction to the use of the above guides. (It doesn't cover* **Russell's** *or the* **Official Railway Guide.***) You won't need it if you read the introductory section in each guide. But it does have nice chapters on ticketing, tours, and other aspects of the business. Unfortunately, there is a large section devoted to descriptions of tourist attractions. The book also contains a complete list of airline, airport, and city codes. Find out where they're really sending your luggage.*

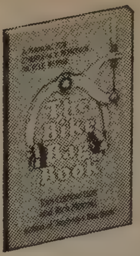
Travel and Tourism (An Introduction to Travel Agency Operations) by Armin D. Lehmann; 1978, 252 pp.; $18.95 postpaid from: Bobbs-Merrill Company, 4300 West 62nd Street, Indianapolis, IN 46268. ■

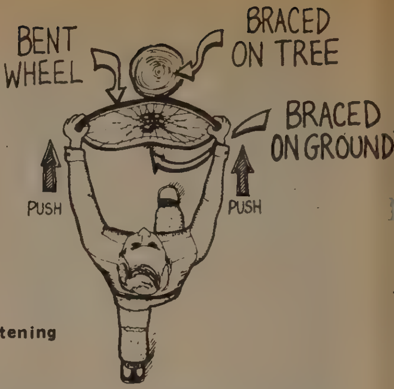
The Bike Bag Book

A condensed carry-along version of Tom Cuthbertson's peerless **Anybody's Bike Book** *(***NWEC** *p. 410), gaining more clarity with fewer words. Perfect for bike trips. It's written to help fix even the most serious en-route bike problems well enough to limp home.* —*Art Kleiner*

The Bike Bag Book
(A Manual for Emergency
Roadside Repair)
Tom Cuthbertson and
Rick Morrall
1981; 132 pp.

$3.45 postpaid from:
Ten Speed Press
P.O. Box 7123
Berkeley, CA 94707
or Whole Earth
Household Store





Last ditch wheel straightening

■

A sprung wheel may well be hopeless. But you can make a last ditch effort if you want. You've got nothing to lose, as long as you don't get so rough you crack the hub.

Let the air out of the tire on the bent wheel, then find a tree or telephone pole that has a root or rock sticking up about a foot out from the base. If you use a rock, pad it with some cloth or a hair net helmet or something, so you don't munch the rim even worse. You can even use a short log braced against the tree if you have to. Just set it up so you have the wheel resting against something solid at the top and the bottom.

Now put the heels of your hands on the parts of the rim that are bent closer to you and shove, leaning your weight into it. Push gently a couple of times to get the feel of things, then harder once, a sharp shove. This should bend the wheel considerably, and it might even pop it back into a shape that's almost round.

Backcountry Bikepacking

Camping outdoors and carrying all your gear (groan) on a bicycle seems like the worst of both worlds at first, until a book like this converts you. My next bicycle trip will include a light tent and sleeping bag. It's hard to imagine a manual written more invitingly and thoroughly.
—*Art Kleiner*

Backcountry Bikepacking
William Sanders
1982; 300 pp.
$9.95 postpaid from:
Rodale Books
33 East Minor Street
Emmaus, PA 18049
or Whole Earth
Household Store
(Available Spring 1982)

●

A certain amount of physical effort is involved, yes, but most people find cycling less fatiguing than hiking with a heavy pack. Even when a hill is too steep and long to pedal, or part of the way unrideably rough, you can still let the bike carry a lot of the weight as you go up, pushing it like a wheelbarrow. Going downhill, you get to take a break and coast; loaded backpackers usually find downhill walking as fatiguing as climbing. True, a canoe or raft will carry you along with the current, but rivers flow only in one direction, which creates the need for complicated car-shuttling arrangements — and maneuvering in rapids can be plenty tiring too.

The People's Guide to Backpacking, Boating and Camping in Mexico

Um, let's say you want to canoe down a river in Mexico — perhaps from the mountains to the sea. How do you find out about it? And what does one do about machismo problems? Where's the best skin diving and which techniques seem to work there? Gringos, it's all here in this spellbinder of a book. I don't see how you could read through it and not immediately commence hatching plans for a south-of-the-border adventure. The useful details include stuff as arcane as an illustrated lesson on how to clean out the gas generator of your Coleman stove after it's been fed Mexican gasoline! But what would you expect from the same man who brought us the classic and still unsurpassed **People's Guide to Mexico?** —*J. Baldwin*

Drives me crazy fer krissakes — desert camping, sea kayaking, tropical exploring on foot, fishing, diving, beach walking, living off land and sea, getting along with backwoods locals, staying unsick in the thornbrush boonies. More of Carl and Lorena's funny and instructive personal adventures, more fact-packed appendices, a continuing Niagara in every chapter of helpful tips for thriving in the Mexican outback. If you can't afford passage to the clichéd South Seas, read this beachcomber's wet dream and pursue your fantasy closer to home.
—*Lewis Watson*

The People's Guide to Backpacking, Boating and Camping in Mexico
Carl Franz and
Lorena Havens
1981; 408 pp.
$11.25 postpaid from:
John Muir Publications
P.O. Box 613
Santa Fe, NM 87501

or Whole Earth
Household Store

●

Getting into the hammock and keeping covered up with a blanket at the same time can be a real trick. First of all, put a blanket-cape-like over your back, allowing enough length so that your feet will be covered when you get in. Clutching another blanket to your chest like a parachute, back slowly into the hammock until it's safe to fall backwards. If you haven't opened the hammock far enough you will do a neat back flip — to the greater delight of anyone nearby. Once inside, form the blankets into a cocoon. If another person is getting in, the procedure is the same except that the second person just drops in next to the first without being wrapped in a blanket.

Before doubling or coupling in a hammock, check it to insure that the ropes and whatever it's tied to will take the strain. If you're in a crude *palapa* (at least one built from my instructions), this is especially important. The posts, if not properly placed, will be pulled together by your weight and could knock you silly.

■

Because so little information is available on Mexican rivers, boaters tend to overlook the possible trips that can be made. I know people who have rafted and kayaked great distances on rivers no one knew anything about, including local natives. One river may be known by many names and the name will change along a river's length. "Where does this river go?" is a question that puzzles those who live along its banks as well as curious boaters.

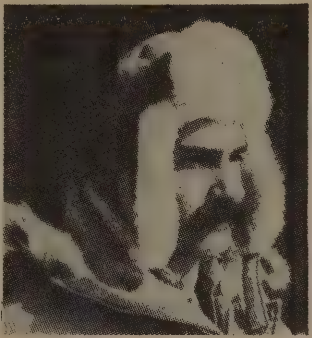
Arctic Trading Company

Purveyors of traditional Eskimo-made gear (caribou parkas, sheepskin mitts, mukluks) as well as cold weather army-surplus gear. —*Paula McKeown*

This company sells parkas, rugs, mittens and other products made from the skins of animals which may be endangered species, including polar bears, seals, wolves, fox, and skunk. Conspicuously missing from their catalog is any explanation or acknowledgement. Conspicuously present is the story of how they employ native Eskimo (Inuit) trappers and managers. But without a clear explanation of the endangered species situation, I personally would not order from the Arctic Trading Company.
—*Art Kleiner*

Arctic Trading Company
Catalog
$2 postpaid from:

Arctic Trading Company
P.O. Box 910
Churchill, Manitoba
Canada R0B 0E0



●
New Army Mounted Pure Wool Dress Pants, heavy styled, great for cross-country skiing, long buttoned fly. Ideal for men or women. Removable Red Stripe. All sizes. $28

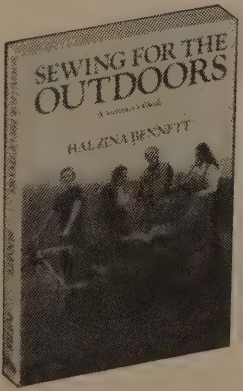
●
Arctic "Chief Factors" Parka
Prime Manitoba Beaver skins are blended with soft Canadian Moosehide, wolf fur, polar bear and black bear. It's all superbly crafted by native sewers at our sewing center. Individual beadwork on both sleeves. Polar bear, black bear and wolf fur trim. $1200.

●
The Trapline Hat
The Arctics warmest most durable, toughest sheepskin hat designed & tested by inuit & indian hunters & trappers & comes down low on neck & chin with velcro tie under chin & above hat. All size S, M, L, XL, XXL. $89

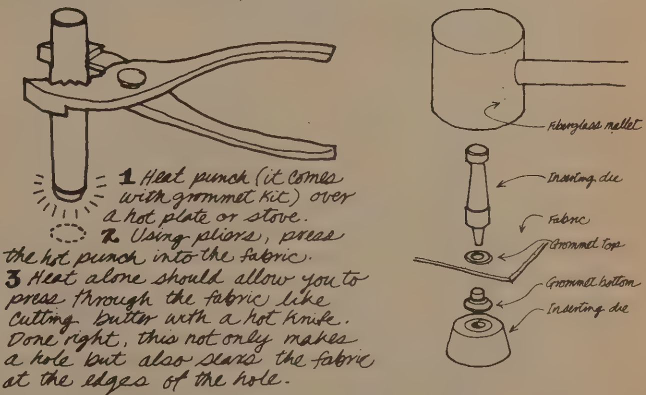
Sewing for the Outdoors

Aimed mainly at rank beginners (and particularly men). Bennett first tries to break down ego resistance and build confidence, then discusses tools and materials, which leads into projects for beginners. Experienced sewers can go right to the projects (bags, packs, panniers, etc.) but I'd bet they could learn something from the earlier sections, too. The book has good designs for basic outdoor gear, clear instructions, plenty of illustrations, a number of obviously hard-earned tips from the author's experience, access information on kits and materials, and even a couple of pages on the design process and how to get your *mind to work that way. Mentions what it's like to be a man in a fabric store: like being a woman in an auto parts or building store. Nothing like having the tables turned on you for real understanding.*
—*Chuck Lakin*

Sewing for the Outdoors
(A Seamster's Guide)
Hal Zina Bennett
1980; 157 pp.
$10.45 postpaid from:
Clarkson N. Potter, Inc.
Crown Publishers
One Park Avenue
New York, NY 10016
or Whole Earth
Household Store



Method for setting grommets:



1 Heat punch (it comes with grommet Kit) over a hot plate or stove.
2. Using pliers, press the hot punch into the fabric.
3 Heat alone should allow you to press through the fabric like cutting butter with a hot knife. Done right, this not only makes a hole but also sears the fabric at the edges of the hole.

●
Some of the projects in this book call for grommets. These come in various sizes — from the shoelace size "eyelet" up to about a half inch (hole size) in diameter. Smaller sizes are often packaged with a plierlike tool for setting them. The larger grommets require a heavy inserting die that you hit with a mallet.

Whole Earth Suckered by Personal

by Ken Crossen

FOLLOWING Stewart Brand's advice for evaluating the Next Whole Earth Catalog, I looked up a topic I know something about — computers. What I found totally missed the spirit of the rest of the Catalog. The computer layout seems to have been prepared with the advice of persons who discovered computers during the recent personal computer boom. Judging from the articles, these consultants apparently view the 8-bit microprocessor as an isolated miracle of technology.[1] Actually computer technology has the pace of an avalanche — any given technology will be buried alive by new technologies in about five years. Information about "classic" computers or computing tools in the last years of their life cycle is mere carving on the tombstone.

Your survey of microsystem hardware (NWEC p. 529) is a motley assortment with no discernible theme. Among the systems mentioned are one excellent system, a few that are absolute trash, some that survive largely through media hype and clever marketing, and the great majority that will, in one or two years, be utterly irrelevant to anyone with a serious computer application. Conspicuously absent is any mention of the Digital Equipment Corporation (DEC) LSI-11 series, machines that will unquestionably outlast most of the surveyed systems by many years. In personal communications with you, I sensed some timidity over the issue of price, and certainly DEC systems are not cheap ($7000 base system). This attitude appears incompatible with the philosophy so tirelessly reiterated by Editor Brand and Soft Tech Editor J. Baldwin: the best quality tool one can afford is the only bargain. Your responsibility to your readers (and what brought them to you in the first place) would seem to be offering educated insight into the world of quality tools. The computer section doesn't.

In an era of cheap, powerful, and reliable hardware, quality software is the critical resource. Here again, the survey of programming languages (NWEC p. 533) offered no basis for quality comparisons, leaving the (mistaken) impression that they are more or less equal. The pivotal issue in software is errors, and a programming language will either help you make them or help you avoid them. While computer (software) errors can be comical or just annoying (botched computer billing, for example), flying into or out of any major airport is literally trusting your life to the absolute reliability of air-traffic-control software. If this seems too farfetched, consider that in spite of the application of massive resources, the Ballistic Missile Early Warning System has erroneously put the U.S. military on several well-publicized maximum alerts.

CoEvolution Quarterly also has done poorly. The "Computer Slang" article (CQ 29, p. 26) presented exactly the jargon that I remember at MIT in the late sixties. There were perhaps two usages in the article that were not gratingly familiar. Jargon used as relentlessly and humorlessly as it was (and apparently still is) very quickly loses its charm. It was half-clever and in-groupy then, is stale now — comparable to "The Collected Witticisms of Don Rickles" — and is computer trivia in any case.

HYPE in the personal computer market is getting pretty thick these days. A recent Radio Shack television advertising campaign portrays what is obviously supposed to be a Fortune 500 corporation using the TRS-80 as a serious management tool. Pure bullshit.

Many of those who own and staff computer stores seem to have discovered computers quite recently and are still in the throes of the "ain't computers just wonderful" syndrome.

Not only us at Whole Earth, says Ken Crossen, but many newcomers to computing have been dazzled by the promises that the microcomputer industry has made since it began to boom in 1975. This article started as an angry letter to me, the Whole Earth Catalog's computer book reviewer, and it grew after I asked for more detail and opinion. Ken is 34, a graduate of the Massachusetts Institute of Technology, a programmer since 1966. He does systems analysis and programming within the Environmental Science and Engineering Department at the University of North Carolina, where they create and update the data bases with which the Environmental Protection Agency makes air pollution control decisions. The few explanatory footnotes here are by me, checked with the author, who incidentally became the father of a baby boy (Jesse Gabriel) about two weeks after this article was written.

As an example of visionary computer use Ken mentions Donald Knuth's METAFONT system, an extraordinary method for designing typeface characters. So I asked Scott Kim, a student of Knuth and a METAFONT pioneer in his own right, to work up a demonstration that includes the designs of the title and initial capital letters. Scott is better known for his inversions, word and letter forms that play calligraphically with ideas of symmetry. His book of them is Inversions: A Catalog of Calligraphic Cartwheels (1981; $9.70 postpaid from Byte Books, 70 Main Street, Peterborough, NH 03458; or Whole Earth Household Store). They're clever and intricately beautiful. —*Art Kleiner*

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[1] Bits are binary digits, the smallest units of logic a computer can process. The terms 8-bit, 16-bit, and 32-bit tell how many binary digits can flow through the data path of the computer's central processing unit in any one computational operation — roughly analogous to how much stuff the foreground of a conscious brain can concentrate on in any one moment. The more bits a computer can concentrate on, the faster its programs can run and the wider range of backlog memory it can search quickly.

Computer Hype

Appealing as this enthusiasm is, some of the systems being offered so eagerly are trash, as anyone with a basis for comparison would realize. The staffs of these establishments tend to present themselves as technically sophisticated, which is not usually the case. Knowing the terminology and manufacturers' specifications does not imply technical expertise.

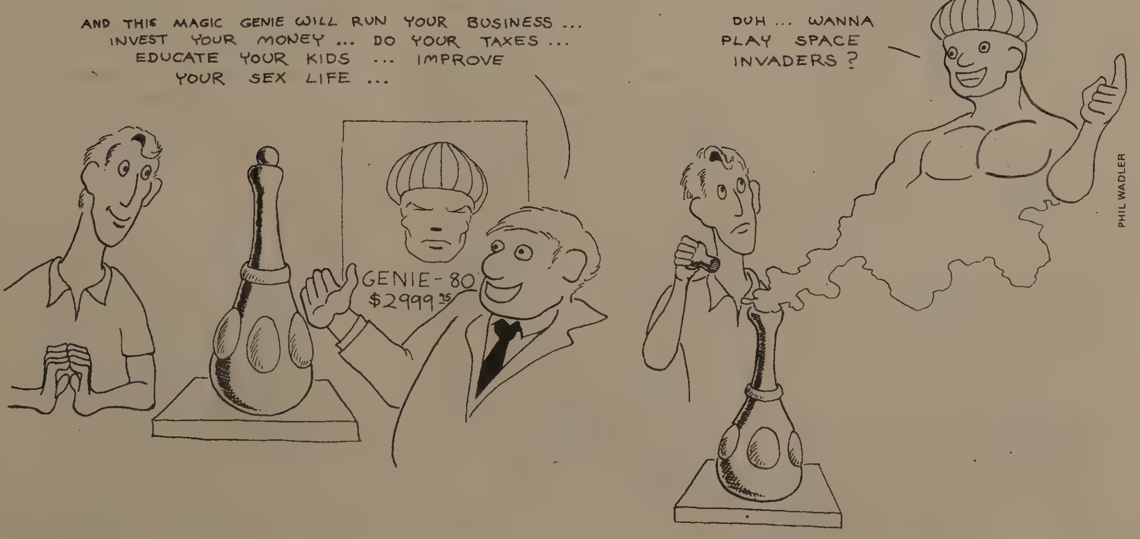
Absolutely the best advice is gotten from those who are doing with computers something similar to what you want to do. Performance comparisons and feasibility studies are a lot less convincing than the functioning article, and no one knows the obstacles better than the person who has slogged over and around them. Fifteen years of professional programming and designing systems and hardware have inflicted these same hard lessons on me. Computers have zero tolerance for ambiguity, sloppy thinking, and promotional hype.

The sophisticated razzle-dazzle of integrated circuitry (what are popularly referred to as chips) has only an indirect effect on the cost of manufacturing computers. It is actually the lowly buttons, lights, cabinets, wires, circuit boards, and connectors that dominate the cost. Packing more intelligence on each chip eliminates expensive circuit boards, and in turn eliminates expensive hand assembly and soldering operations, which makes the entire computer less expensive. Microcircuit manufacturers, pressured by technical innovations, respond in a continuous, competitive stampede to either cut prices on existing chips or design still smarter circuits.

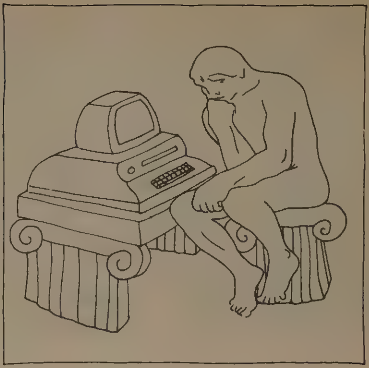
One result of this trend is that 8-bit microcomputers (Apple, TRS-80, and so forth) will soon be overrun by 16-bit microhardware. Meanwhile, active development proceeds on 32-bit microsystems. When the cost of a desirable performance boost becomes small relative to the total system cost, a market gold rush is precipitated.

There does seem to be one potential limitation to this seemingly limitless concentration of computer power. Circuitry representing one bit on current memory chips is so small and uses so little energy to maintain its value that background radiation of the material in which they package chips can change that value. This phenomenon seems to pose fundamental limitations to man's technology. One typical scheme uses 5 check bits for each 16 bits of information. It's easy to figure how this "fix" will work out — Dick Tracy's wrist computer lobotomized by cosmic rays.

THERE are some 16-bit microsystems already available for about $8000 (including operating system and a good high-level language compiler), and many more will soon be available for less. Unlike most 8-bit micros, many 16-bit micros can operate directly on 16-bit words as well as 8-bit words (bytes), and have floating point hardware instructions (which can manipulate fractional or decimal numbers instead of just integers). If you like to use numbers larger than 255 or compute with decimal fractions like 3.14159, these features can be useful. The 8-bit micros do this arithmetic with software, which occupies memory and slows execution by one to two


AND THIS MAGIC GENIE WILL RUN YOUR BUSINESS ... INVEST YOUR MONEY ... DO YOUR TAXES ... EDUCATE YOUR KIDS ... IMPROVE YOUR SEX LIFE ...
GENIE-80 $2999.95
DUH ... WANNA PLAY SPACE INVADERS ?
PHIL WADLER

The Charles River Data Systems' MF-211, one of many microcomputer systems based on the LSI-11 chip



SANDY BRANSCOMB

orders of magnitude. Many useful programs will execute so slowly on an 8-bit micro that the user can sit (bored) and watch the machine "think." Through software, 8-bit micros can accomplish nearly anything that a 16-bit micro can do . . . eventually.

The LSI-11 series computers are the premium 16-bit microsystems. They are actually micro implementations of existing 16-bit minis, the DEC PDP-11 series. DEC has built a solid reputation for superior hardware, innovative design, and general technical excellence. A number of companies assemble LSI-11 systems, including Charles River Data Systems (4 Tech Circle, Natick, MA 01760) and Scientific Micro Systems (777 East Middlefield Road, Mountain View, CA 94043). Typical systems range in price from about $6500 to $20,000, depending on peripherals, operating system, and purchased software. At $20,000 you would certainly have the Mercedes-Benz of microsystems.

There are two versions of the LSI-11: the LSI-11/2 and the LSI-11/23. The 11/23 will support more memory and more powerful software. It is faster, has double precision floating-point instructions, and costs about $1200 vs. $600 for the 11/2. Unless the extra $600 is an overriding consideration, I would recommend the 11/23 as the basic processor because of the larger memory potential and the much greater variety and sophistication of the available software. Get the floating-point chip (for the 11/2) and the floating-point and memory management chips (for the 11/23) — they are well worth the cost ($100 to $250).

OPERATING SYSTEMS

THE computer itself is not capable of performing even so simple an operation as printing a number, let alone maintaining access to data files, running programs, and generally giving the user convenient and comprehensible access to the power of the machine. This basic software environment is provided by the operating system, the program which defines the system's personality as the user sees it. You want something friendly and well behaved.

Users of the DEC microsystem have by far the widest choice of operating systems. Their basic single-user system is the RT-11. It is convenient, powerful, and reliable, but its best feature is its documentation. RT-11 Version 4 includes excellent step-by-step tutorials for all of the utilities a beginner is likely to use.[2] There is also a brilliant description of the inner mechanisms of RT-11 for experts.

The multiuser operating system made by the same people is called RSX-11. Many business-oriented utilities run in the RSX-11 environment including electronic forms packages, data-base management, report generation, and network software. RSX requires the 11/23 as a minimum processor.

Although widely advertised in personal computer magazines as an operating system, UNIX was designed by and for sophisticated computer hackers and remains something of a hacker cult item. The commands are terse and very powerful, but UNIX is not particularly "friendly" (something between helpful and forgiving in computer jargon). There are many different versions of UNIX, not all compatible, not necessarily supported, and not necessarily well documented.[3] The latter two mean that if you have a problem, then it is your problem, and you really have a problem!

The University of California at San Diego (UCSD) PASCAL operating system is deservedly popular among beginners. Considering its price, performance, and features, it is the ideal tight-budget starting system.

SOFTWARE

"Any program that
works is better
than any program
that doesn't."
—Countless
anonymous hackers

THE QUESTION of whether a program works or not turns on the number and seriousness of the bugs (errors) in the program. Any nontrivial program is virtually certain to have bugs, and the larger or more complex it is, the more it will have. Minimizing and eliminating errors is the key issue in programming, yet it is also the most consistently underestimated, especially by beginners. Both the conceptual structure and the range of data inherent in even a modest program are so vast that they might as well be infinite. Like the

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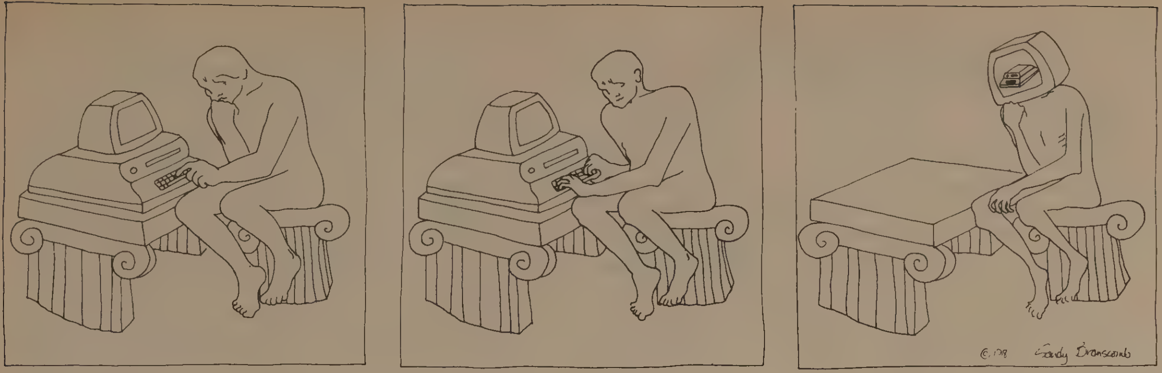
[2] Utilities are "computer programs you're supposed to take for granted," Ken Crossen said. They were named after the energy and telephone utility networks, which route power and sound to homes without making their own structure obvious. Utilities are the programs through which a computer user develops a relationship with the system; their commands help the user find what he or she needs within the computer more conveniently and quickly.

[3] All complex programs have unforeseen errors which don't show up until they're used. A supported program is one where, if an error shows up, the user can call the people who sold it and they'll fix the error and send that user and everyone else a revised version. In other words, a supported program is one that's maintained and updated. Documentation in computing means instructions; a well-documented computer or program is one with a good instruction manual that is reasonably comprehensible to others besides the person who wrote it.



makers of mandalas, programmers must leave flaws in their programs as naked admission of human imperfection. Finding (and correcting) bugs promises to remain the ultimate sorcery in programming.

Ideal software should appear to the user as a tool, with simple, intuitive, and powerful controls. It should do the task and tolerate user errors gracefully, even helpfully. Most software falls far short of this ideal because the programs themselves are not well made.

Programming languages are the tools for crafting software. A computer language, like any language, shapes our thinking, and like any tool, shapes our craftsmanship. In this respect, programming languages differ considerably. A good programming language encourages (inspires) precision and clarity of expression, simplicity of organization, and intuitive representation of the problem. The first programming languages (FORTRAN, BASIC) were designed around the limitations of then current computers, so the programmer had to adapt to the idiosyncrasies of the machine. More recent languages (PASCAL, ADA) have been designed to adapt the machine to the intellectual limitations of mortal programmers.

"Best language" discussions are often heated and rarely rational. Many programmers dread retraining to use a new and unknown tool and thus becoming novices again. Other programmers derive an elitist sense of self-worth from writing a program that no one else can understand. One dedicated FORTRAN programmer recently told me that his objection to PASCAL was that it was a "funny language." A language evaluation in the Next Whole Earth Catalog (p. 533) noted that some programmers considered PASCAL "boring." These criticisms are so lacking in insight as to suggest that the critics know little or nothing about PASCAL (which has more important defects). Although I prefer PASCAL and PL/1 (G), neither is ideal, and neither has every feature that any particular programmer might want. They are simply the best available tools and will have to do until something better is designed.

FORTRAN and BASIC are simple languages which are easy to learn, and which produce very compact and efficient machine code. Both are primitive in that it is difficult to represent anything but numbers in FORTRAN or BASIC. They also have primitive logical structures which lead to clumsy and obscure representation of a program's task.

APL carries the virtue of concise expression to a fault. It is also not a language for beginners. Why is it that some computer professionals insist on presenting the most inaccessible and intimidating face of computers to the general public?

PL/1 was (obviously) designed by a committee and turned out a baroque labyrinth of features. The design process could best be described as accretion — PL/1 attracted new and obscure features like lint to a blue suit. Recently another committee defined a more reasonable subset, PL/1 (G). Subset G is the most powerful general purpose language available for micros, especially in its rich and potent input/output capabilities. PL/G is available in several implementations for micros, but they have not been on the market long enough for comparative evaluation. For those whose taste in computer languages runs to something like the 747 cockpit instrumentation, try PL/1 Subset O.

PASCAL is now the dominant language in the teaching of programming and in the literature of computer science. It is one of the few common programming languages designed by one person (Niklaus Wirth) rather than by a committee, which accounts for PASCAL's conceptual integrity.

PASCAL is classically elegant. It is powerful, precise, logically and harmoniously organized, and allows the programmer to express a wide range of concepts with mnemonic names. In PASCAL, the name of any object in English (or French, German, etc.) can be used to represent that object. For example, we can define taste by declaring: "taste = (sweet, salty, bitter, sour, spicy, pungent, hot)" and then we can manipulate the concept of taste in our program in a way suggestive of English usage:

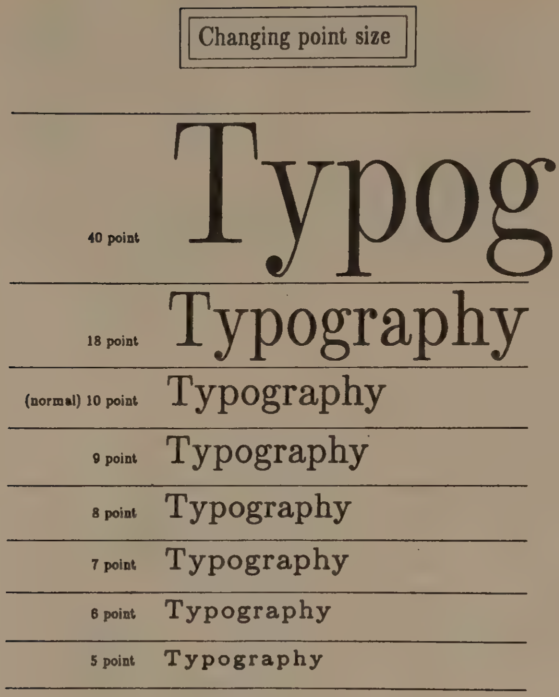
```
IF Tijuana_Fats_chili_sauce_
taste = hot
THEN gulp_beer_from_pitcher
ELSE complain_to_waitress
```

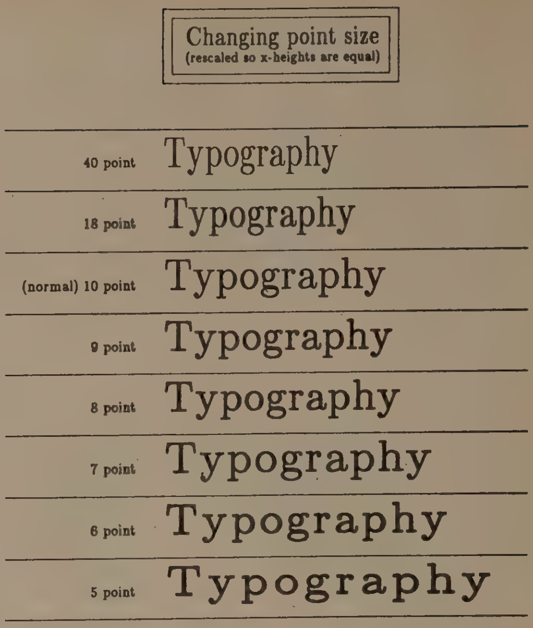
Internally the computer still refers to tastes by some obscure number code, but the programmer does not have to be aware of or confused by this.

For DEC systems, the ultimate PASCAL is Oregon Software PASCAL-1 or PASCAL-2. OS PASCAL-2 is robust, clearly documented, and obviously superior to any of the ten or fifteen PASCALs I have encountered. Information is free from Oregon Software (234 SW Canyon Road, Portland, OR 97201). They offer PASCAL programs from $950 to $3450.

(NEAR) FUTURE FANTASIES

THE MOST significant advance in computer system design is the new concern for friendliness. When computer time was expensive relative to salaries, it didn't seem to matter much how convenient computer systems were to use. Data coders were expected to learn the (generally illogical) card layouts and not inconvenience the programmers with considerations like ease of use, ease of error detection, ease of correction, and so forth. The advent of


Changing point size
40 point
Typog
18 point
Typography
(normal) 10 point
Typography
9 point
Typography
8 point
Typography
7 point
Typography
6 point
Typography
5 point
Typography


Changing point size
(rescaled so x-heights are equal)
40 point
Typography
18 point
Typography
(normal) 10 point
Typography
9 point
Typography
8 point
Typography
7 point
Typography
6 point
Typography
5 point
Typography

I designed these letters and the title and initial letters of this article in METAFONT. While METAFONT is too young to be widely useful or available yet, it helps underline the point that it takes real computer power to solve a real problem.

The problem here is to design a typeface so that it looks correct for all sizes. Notice that the letters designed for small point sizes are relatively fat, while the larger letters show a greater contrast between thick and thin. This change of shape helps compensate for the fact that thin lines are hard to see and tight spaces tend to close up with ink as letters get smaller. The second illustration makes the shape changes more obvious by printing all the letter forms at the same size.

In the days of hand-cut metal type, such compensations were incorporated by the designer. These subtleties have been largely obscured in the current phototypesetting technology, where one photographic letter form is enlarged or reduced to fit all type sizes. Computer type design systems like METAFONT offer the possibility of reestablishing these subtleties, returning control to the designer, and of then incorporating the newly designed character forms into a text processing system. METAFONT produces letters which are a far cry from the coarse mechanical letter forms (often composed of dots) which most computer printers produce. These letters were printed by a modified photocopy machine whose grid of tiny black-or-white grains was controlled by the METAFONT computer. —Scott Kim

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cheap hardware has exposed the fundamental short-sightedness of this philosophy. Since the actual system cost is the same whether it is "thinking" or executing the wait loop (computer "thumb twiddling"), the machine might as well be helpful rather than merely detecting errors and playing now-I've-got-you-you-son-of-a-bitch with the user.

Combining the best features of PASCAL (after which it was modeled) with the power of PL/1 and then some, ADA promises to be the pre-eminent language of the eighties (it will be generally available in 1982). The fact that the U.S. Department of Defense, the largest software purchaser in the world, intends to require the use of ADA for all contracts virtually guarantees this. Although critics of ADA claim that it is nearly as complex as PL/1, ADA's complexity is at least logically organized.

The first 32-bit microsystems will also be announced this year (for delivery sometime thereafter). Such machines will bring a fair approximation of main-frame power into the $20,000 to $30,000 range. These developments will tend to spread the benefits of computer usage far more democratically.

There is an application of this potential which is familiar to anyone who reads. Until very recently printing has been rigidly constrained by the rectilinear nature of mechanical type. The new typesetting is based on the concept that a page is composed of millions of tiny dots. All dots on the page that must be black to represent the image are "turned on" by the computer. To make a page that's ready for the printer's camera, the computer activates a raster printing device which, instead of typesetting individual characters, sets up a grid (or "raster") of 40,000 to 160,000 dots per square inch and prints any combination of them all at once (operating on the same principle as a xerographic copier). Dramatic reduction of the effort required to produce a page and a general shortening of the creative feedback time tend to remove that hesitation to experiment that results when failures

A classic of computer science

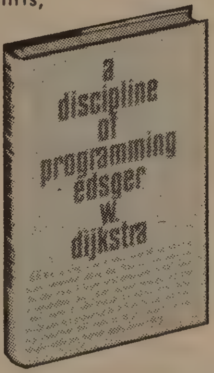
My definition of a classic is: A clear vision of reality which appears when everyone else is wondering what the issues are, and which, when generally recognized, unfolds into obvious truths regarding the current situation and ultimately sheds light for generations into other (seemingly unrelated) domains. I'm not referring to the person on the street corner shouting, "World ends in 30 days — Repent now sinners!" but to that calm person observing with casual certainty that our greedy living will one day destroy us.

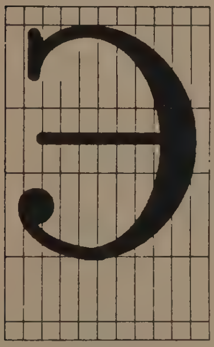
Edsger Dijkstra is one such visionary, but recommending his writing (**A Discipline of Programming**, for example) is like recommending Gurdjieff: it's dense. He is not writing in his native language, but in English, the language of computer science. Consequently, his presentation has some of the eerie and slightly uncomfortable formal elegance of Joseph Conrad. Interesting to note how many of the most prominent personages of computer science repeatedly express their debt to and appreciation of Dijkstra's insight. While all around him were indulging in euphoric optimism engendered by explosive growth in hardware performance, Dijkstra was patiently calling attention to the foundation of the hardware tower, the very mortal programmer whose intellect was already quivering with fatigue. Dijkstra's concepts are now so thoroughly ingrained in computer science and computer practice that it is hard to imagine the field without them.

A parallel problem is the difficulty of representing the central issues of computer science to the general reader — it is so abstruse. Like medieval theology, it shapes and is woven deeply into its society, is only faintly aware of its impact on or responsibility to society, but is intentionally a topic of near total ignorance within that society. Forty years ago, nuclear physics was a topic of interest to a very select subset of intellectuals. Today Einstein is a pop star and half of society is trying to figure out the fine print on our bargain with the devil. People don't need to be frightened (manipulated), they need to ask embarrassing questions — like what the hell are you going to do with all that hot waste? Where we are now is that the problems are either soluble and pragmatically irrelevant or are insoluble and have the potential to sweep everything but cockroaches into the cosmic dust bin.

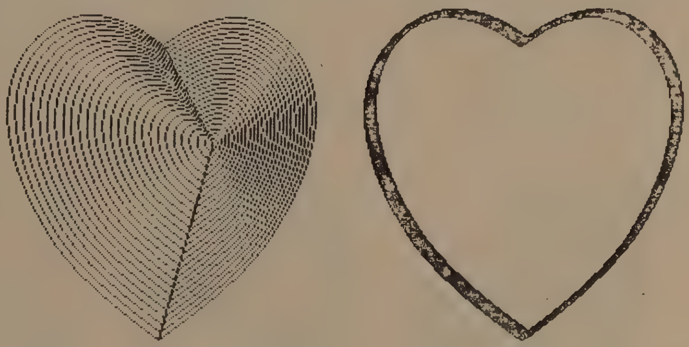
—Ken Crossen

A Discipline of Programming
Edsger Dijkstra
1976; 240 pp.
$26.25 postpaid from:
Prentice-Hall
P.O. Box 500
Englewood Cliffs,
NJ 07632





Three characters designed with METAFONT — the hearts from TEX and METAFONT and the cyrillic letter "Eprime" by Barry Doherty and Ronald Whitney in TUGboat.



are expensive and the fruits of inspiration are long in coming.

As one example, the TEX-METAFONT computer typesetting system devised by Donald Knuth is available for the cost of copying (under $100) and will run on any 32-bit machine with a decent PASCAL compiler. The American Mathematical Society publishes TUGboat, an "irregular" newsletter for the TEX Users Group. (Membership $15/year, includes subscription, from TEX Users Group, c/o American Mathematical Society, P.O. Box 1571, Annex Station, Providence, RI 02901.) Each newsletter (better than most magazines in print quality) is "typeset" by TEX and contains many examples of the power of TEX. The first word on this system is TEX and METAFONT: New Directions in Typesetting, by Donald E. Knuth (1979, 304 pp.; $12 postpaid from Digital Press, 12-A Esquire Road, North Billerica, MA 01862).

In 1965, I took my first computer course, taught by the MIT civil engineering department. This course was unique in being "hands on" the hardware (like finding a pearl in an oyster then) and presented the topic through problems that had real world substance and real world complexity. Such as, given five playing cards, determine the best poker hand to be made from them. Unlike the usual dry technical exercises designed to demonstrate concepts, these forced the student to deal with objects meaningful to humans, the very essence of programming craft. Many schools now offer computer courses, and I recommend this evaluation method: Ask to look at typical assigned exercises. Are they intelligible to you? If not, wonder why. A lot of courses teach computer coding without even hinting at the craft of programming. MAKE MISTAKES — ASK QUESTIONS. Forget canned software and forget the omnipresent "hand holding" of the personal computer market. They will only anesthetize your creativity.

Examining reality closely enough to explain it to the fast-calculating moron illuminates the difference between relevant and irrelevant as few other activities can. ■

Classics in Software Engineering

There has been a quiet revolution in computer science during the past decade. Here are the first shot, the speeches, and the pamphlets that called programmers to action — all collected in one book. A gentle introduction to the literature; any programmer with a little experience should understand most of the papers. —Ken Crossen

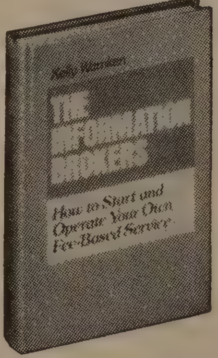
•

Part of the reason for retaining *goto* is that the world is not always a very elegant place and sometimes a *goto* is a useful, if ugly, tool to handle an awkward situation. Algorithms are often messy. Sometimes this may be due to inherent complexity. I suspect, however, that most of the time it is because not enough time or intelligence has been applied. Where time or intelligence are lacking, a *goto* may do the job. Every program will not be published. Many may be used only once. I tend to sympathize with the programmer who fixes up a one time program at 3:00 a.m. with a *goto*. Of course, there is always the danger that the programmer will lapse into bad habits but I am willing to take that chance. Perhaps it is an opportunity, for when the intelligent supervisor reads the code of those under him, he can focus on any *goto* statements. A programmer should be able to justify each use of *goto*.

The Information Brokers

What with the blooming of computerized data bases and the information economy, independent research is becoming a promising new self-employment opportunity for liberal-arts educatees. The people who search data bases now will have an inside track into strange new information-shepherding jobs in computer networks to come. We reported this in the Winter 1980-81 CQ ("Information Detective Stories," p. 122) and since then we've been asked how to get started by dozens of people, including my father, a retired English teacher. Well, Dad, this book tells how. It also tells where to learn the skills and sell them once you've got them. Like most Bowker books it's excellent, overpriced, and oriented toward libraries. —Art Kleiner

The Information Brokers
(How to Start and
Operate Your Own
Fee-Based Service)
Kelly Warnken
1981; 154 pp.
$24.95 postpaid from:
R.R. Bowker Company
Fulfillment Department
P.O. Box 1807
Ann Arbor, MI 48106



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Yes, small businesses do fail, but fee-based information services have enjoyed a lower failure rate than other small businesses. Perhaps it is because owners have avoided two often-mentioned reasons for business failures — undercapitalization and poor management.

Because a fee-based information service does not require the purchase of stock, lease of office space, or other substantial investment, it needs about the least amount of capitalization of any business. Although it is not advisable, some successful firms were started with no capitalization at all.

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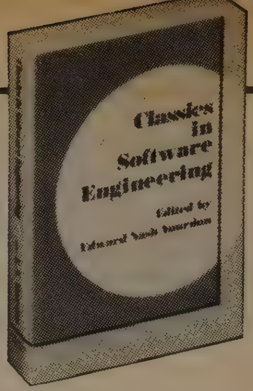
Neither the client nor the fee-based information service owns the information. Information belongs to the public and is not "sold" by the fee-based information service to the client. What is sold is the expertise to gather information for a client.

Classics in
Software Engineering
Edward Nash Yourdon,
Editor
1979; 424 pp.
$28 postpaid from:
Yourdon Press
1133 Avenue of
the Americas
New York, NY 10036



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Using PL/1 must be like flying a plane with 7,000 buttons, switches, and handles to manipulate in the cockpit. I absolutely fail to see how we can keep our growing programs firmly within our intellectual grip when by its sheer baroqueness the programming language — our basic tool, mind you! — already escapes our intellectual control. And if I have to describe the influence PL/1 can have on its users, the closest metaphor that comes to my mind is that of a drug. I remember from a symposium on higher level programming languages a lecture given in defense of PL/1 by a man who described himself as one of its devoted users. But within a one-hour lecture in praise of PL/1, he managed to ask for the addition of about 50 new "features," little supposing that the main source of his problems could very well be that it contained already far too many "features." The speaker displayed all the depressing symptoms of addiction, reduced as he was to the state of mental stagnation in which he could only ask for more, more, more . . . .

— Edsger Dijkstra

Software Reliability

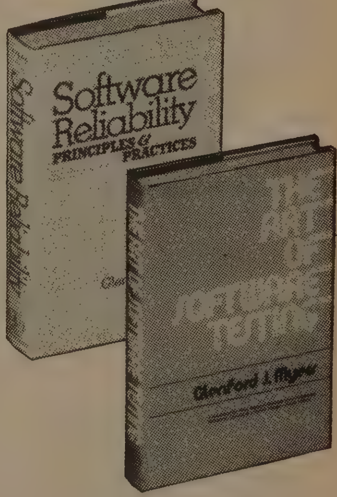
The Art of Software Testing

Two volumes by a hard-nosed pragmatist that start from obvious considerations of human psychology and proceed forcefully to very concrete practical antidotes. The first tells you how to avoid errors and the second tells you how to find some of your errors afterwards. An unblinking view of the dark side of systems that is well within the reach of any programmer. —Ken Crossen

Software Reliability
Glenford J. Myers
1976; 360 pp.
$29.95 postpaid

The Art of
Software Testing
Glenford J. Myers
1979; 177 pp.
$21.95 postpaid

both from:
John Wiley and Sons
One Wiley Drive
Somerset, NJ 08873
or Whole Earth
Household Store



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The best documentation for program logic is a simple and clean code structure using indentation and meaningful variable names, and following the other guidelines of programming style. If the code has these properties, a large number of comments in the code is unnecessary and, in fact, often undesirable. Comments have been known to *hinder* debugging because the debugger often believes the comments, resulting in his not examining the code close enough. Experienced debuggers often cover the comments with a sheet of paper when they are looking for an error in a module. —**Software Reliability**

Turtle Geometry

Inside the multi-dimensional space of a computer screen, there's a moving point — the turtle — that's intimate with the consciousness and will of the person behind the keyboard. Once programmed, it chooses where to move, it measures where it has moved and it recognizes when it returns to a place where it has already been. Learning to program the turtle forces you to learn the language of a living geometry that encompasses Einsteinian curved space and time. There's a very full and responsive world in there, and this book (without or preferably with a computer) may be the only accessible tool for colonizing it.

The book's structure deliberately parallels the way people throughout history have figured out our own universe. I never realized before how deeply shocking it must have been when people first learned the world is round — as shocking as it is now to grasp that time moves at different speeds in different places.

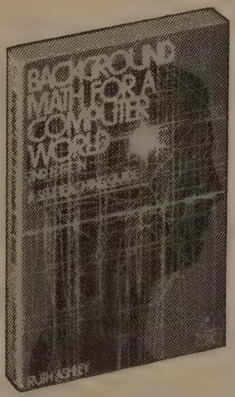
This is the most exciting math textbook I've ever seen. If you want some background on how entering the world of turtle geometry changes kids, see Seymour Papert's **Mindstorms** *(***NWEC** *p. 536).* —*Art Kleiner*

Turtle Geometry
Harold Abelson and
Andrea diSessa
1981; 477 pp.
$20 postpaid from:
MIT Press
28 Carleton Street
Cambridge, MA 02142
or Whole Earth
Household Store

Background Math for a Computer World

Just that. A nice catching-up book, with exercises, if you are thinking of programming but never quite grasped what, say, a trig function is. —*Art Kleiner*

Background Math for a Computer World
Ruth Ashley
1980; 308 pp.
2nd Edition
$7.95 postpaid from:
John Wiley and Sons
One Wiley Drive
Somerset, NJ 08873
or Whole Earth
Household Store



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It is absolutely essential that algorithms be *unambiguous*. They must be clear; there must be no doubt at all about how to do a step or what step comes next. A step such as "multiply x by a smaller number" is ambiguous. A better way of writing such a step would be:

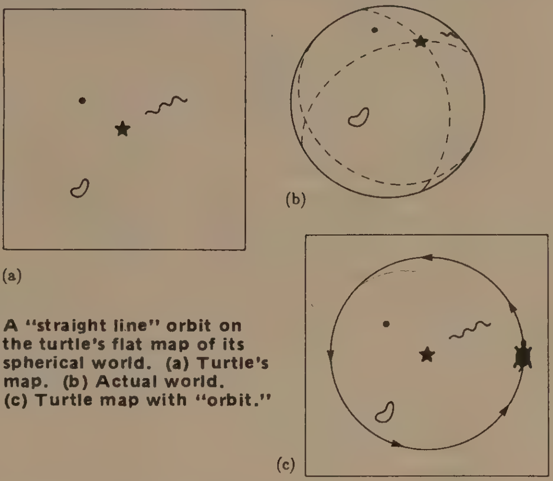
_(a) multiply x by a larger number
_(b) multiply x by the next smaller whole number
_(c) multiply x by one-half the value of x

— — — — — — — — — — — — — — — —

(b); (c) (Neither of these is ambiguous if x has a value.)

•

Imagine a four-dimensional turtle sitting at 0 = (0, 0, 0, 0) looking down the *t* axis (x, y, z, t basis) through a "three-dimensional window" at t = L. The turtle sketches on (in) the "window" the object it sees, and hands this three-dimensional image to you to walk around and look at in ordinary three-dimensional space. Suppose the object the turtle is looking at is a four-dimensional cube. What do you see when you walk around or rotate the three-dimensional image? What do you see as the four-dimensional cube is rotated but your position with respect to the three-dimensional image remains fixed? What can you say about the three-dimensional "thing" that is the projection of the four-dimensional cube?



A "straight line" orbit on the turtle's flat map of its spherical world. (a) Turtle's map. (b) Actual world. (c) Turtle map with "orbit."

Video Swapper

Trade-A-Tape Gazette

Here are a couple of homegrown video publications. They carry have-and-want lists of individuals plus commercial ads and technical info. Best sources for people trying to find obscure movies, TV series, concerts, specials, etc. —*Scott Parker*

Video Swapper
Alex Kanakaris, Editor
$12/year (12 issues)
from:
Video Swapper
P.O. Box 309
Fraser, MI 48026

Trade-A-Tape Gazette
Jerry D. Moore, Editor
$6/year (6 issues)
from:
National Video Network
615 Woodbine Drive
San Rafael, CA 94903

VIDEO SWAPPER
$1.00
TRADE A TAPE
Gazette
SHIRLEY TEMPLE

▪

Space Shuttle Columbia's maiden voyage, astronauts Young and Crippen narrate. VHS and Beta, 17 min., $19.89. NASA footage of Shuttle topics, Skylab missions, Manned Lunar Expeditions and Voyager planetary missions to Jupiter and Saturn. Send self-addressed stamped envelope for detailed descriptions and prices. Transvideo, P.O. Box 236, Alief, TX 77411
—**Video Swapper**

MORE CORNERS OF THE WORLD

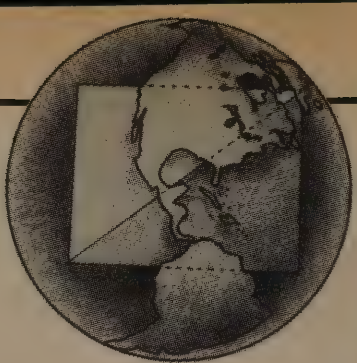


Diagram of David Barr's 1976-1982 Four Corners, with tetrahedronal corners emergent at Easter Island, Greenland, New Guinea, and South Africa.

QUISADA/BUREKE, RONALD FELDMAN GALLERY

Thomas Shannon and one of his corners, in New York City

The cover story of the Fall '81 CQ, about an artwork by David Barr incorporating the whole of the planet as part of a tetrahedronal sculpture, has become, to our horror and fascination, a meta-artwork. It began, for us, with this letter (among a half-dozen others confirming the overlap). —Stewart Brand

October 21, 1981

Re: Plunderers

Dear Stuart Brand,

If you saw a pretentious plagiarism of your work on the cover of a magazine you like, how would you feel? I'm more than annoyed.

For one thing your art editor, Bob Horvitz, attended the opening of my 1976 exhibition at Ronald Feldman gallery in New York. That was the first public showing of my **Corners of the World** sculpture. I've entertained Horvitz at my studio on several occasions. He is well aware of the work.

The original project drawings date from 1974. The complete work consists of 5 sets of corners (50 in total) distributed around the planet, defining the vertices of the 5 regular solids, a tetrahedron being one. Descriptions of the project were published in the **Village Voice**, December 20, 1976; **Arts Magazine**, February 1977; and **ArtNews**, November 1979; three international publications sold in Michigan.

It's not a coincidence. Besides taking the essential idea of placing the corners of a regular solid around the planet he has taken the title, the selection of specific cultural sites, the emphasis on communication, and the reflector to outer-space concept. His variations are trivial.

I resent someone working on my project and calling it his own. I resent being put in a position of having to write this letter. The plagiarist receives a cover and five pages, the originator receives what?

Sincerely,
Thomas Shannon
New York, New York

24 Nov 81

Dear Thomas Shannon,

Your admirable earlier work with Earth corners was unknown to me. Art Editor Horvitz didn't see the **Four Corners of the World** piece before it was printed (he lives on the East Coast).

What can I offer the originator? How about $100 to print your letter in full, plus an illustration or two for it if you don't mind sending them, plus David Barr's commentary on the pedigree of his corners?

Stewart Brand
Editor

December 6, 1981

Dear Mr. Brand,

Enclosed is my return letter, plus a resumé, plus an article that came out in the **Chicago Tribune** as the result of an interview several months ago. I have never had to deal with such an accusation before in my life, having ten times the ideas I ever have time to act upon, so I am unsure as to the proper way to handle this and therefore, to some extent I am willing to rely on your instincts here. Since this involves my entire life I am confident that you will be fair and patient in communicating any developments to me. But, if you wish to forward my letter, resumé, etc. . . . to any of the people who have written, or may in the future, write to you, please feel free to do so. Also, feel free to contact any of the museum personnel (I can supply others as well) I have mentioned if you feel that would be useful. Let me know if there is any other information you would like . . . this is probably the most horrifying event I have ever had to face with my work (perhaps I've just been fortunate), but I would take a plane unable to take off from the Greenlandic ice cap anytime!

Thanks again for everything, I do hope that reason and truth will out.

Yours,
David Barr
Northville, Michigan

Dear Mr. Brand,

In reference to Mr. Shannon's letter which you forwarded to me December 3, 1981: Mr. Shannon's assumptions are mistaken. I have never, until this time, heard of Mr. Thomas Shannon nor of his proposed sculpture. In early 1976 I began planning, discussing, lecturing, and presenting my project to what has now become thousands of people in the art world — artists, students, teachers, dealers, historians, and curators. Never has anyone mentioned Mr. Shannon or his project to me. You can be sure that given even the vaguest of descriptions (which is still all I have of his proposal) I would have made every effort to contact him and exchange ideas. I maintain just such relationships through correspondence with artists in the U.S., Canada, and England. I do not, nor have I ever, subscribed to **Art News, Arts**, or the **Village Voice.**

Thus, after a 20- year career establishing my work and my integrity, I find myself asked to defend myself against charges of plagiarism made by someone totally unknown to me. "Plagiarism" is a vicious word and one which demands evidence — not supposition — to support it morally or legally. I *can* understand Mr. Shannon being upset, since, of course, so am I.

Here is my evidence.

I have been working with the tetrahedron and other basic constructivist forms since the late 1950s. The **Four Corners Project** is a part of a continuing evolution of ideas with a lineage easily traceable to that time. For instance, the Detroit Institute of Arts purchased a sculpture of mine in 1964 (Construction Number 50, 1963) which is a tetrahedron inside a cube, with the outer points of the tetrahedron touching the surface of the cube. Articles, catalogs, and reviews describing my involvement with the structurist/constructivist vocabulary are available. I have been a regular contributor to **The Structurist** since 1966. The issue released in 1980 (but drafted in 1979) contains an article of mine which briefly

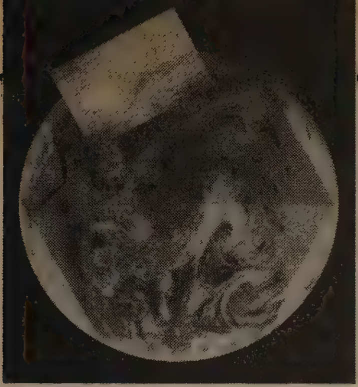


Diagram of Thomas Shannon's 1976 Corners of the World **showing his 4800-mile cube and one enlarged corner.**

alludes to the **Four Corners Project.** As an aside, it is clear how the actualization of the project has continued to evolve from those recent brief references, indeed as all my work evolves, going through a constant process of refinement, editing, and rethinking. My work, both in relief and full dimension, has been exhibited in Chicago, Detroit, Kansas City, Los Angeles, San Jose, and Toronto since the 1960s. I have lectured frequently in the United States, Canada, and England, openly presenting my work, its origins, its influences, its evolutions, and its directions.

This project has been thoroughly discussed with, among many others, the following curators: John Neff of the Chicago Museum of Contemporary Art; Kiichi Usui of the Meadowbrook Art Gallery, Oakland University, Michigan; Dan Mato, historian, University of Calgary; Jan van der Marck of the Dade County Museum of Contemporary Art; and Michael Kan, deputy director of the Detroit Institute of Arts. I am confident that they will all testify to my being the sole creator of the **Four Corners Project** and that it is the recognizable result and consequence of the issues I have been single-mindedly absorbed with for 20 years.

It is conceivable that with the further publicizing of my project, more artists may come forth with varied reactions, histories, and proposals. I do not fear this. It only seems to indicate shared sensibilities within a particular period, and it is here, after all, that historians love to categorize and label "movements." If indeed Mr. Shannon's project is in any way related to mine, we must recognize the fact that the history of science and art is littered with examples of simultaneous creation: Darwin and Wallace, cubism, impressionism, dada, pop art . . . the list is long and, I might add, noble. When I am able to put aside my shock over the consequences of this possibility, I find some solace in recognizing that in whatever elements our projects may share, we would only be witnessing this phenomenon. Perhaps the thing to do in such a case is welcome it as connection and the result of history funneling down to certain expressions. Of course, it is in the difference between the individuals that the historic assessments are made. From the little I can deduce about Mr. Shannon's proposal, I suspect that they are significantly different projects, varied in image, issues, concept, presentation, and realization. I would have to know a good deal more about his proposal to comment fairly, but from what I can surmise, let me list a few obvious distinctions.

Title. My title, as you know, is **Four Corners Project**. Someone on your staff gave the **CoEvolution** printing the headline "Four Corners of the World." A check of the original manuscript will show that the phrase "corners of the world" is used *within* the essay precisely because it is a deliberate cliché, with what I felt was a wry twist . . . the same impulse that draws anyone to pun or play with familiar phrases. A month ago I learned of a piece by artist Aaron Marcus called **Four Corners Piece** which apparently alludes to the four corners of the United States.

While my locations of the corners of the tetrahedron are mathematically calculated, the reason for *selecting* those areas is historical, sociological, and anthropological. These primary objectives are presented in the **CoEvolution** article, I feel, but I will be glad to expand upon it if and when space permits. I have little of the technological interests that Mr. Shannon seems to have; my focus is on the structural process of nature and the role of the human being as a conduit of creative response out of that process. Thus, the corners of my piece are intended to be virtually invisible, with the sculpture taking form by the sharing of it as an idea, person by person, and not placed as an "art object" in a sophisticated art community.

The image of the tetrahedron relating to a sphere is of course ancient, with manifestations from Pythagoras to Kepler to Tatlin to Buckminster Fuller, and I happily acknowledge their influence. . . .

This leaves us with the idea of forms within the earth — a prehistoric preoccupation, one of the reasons I find it meaningful. I have studied and traveled to many megalithic sites in Spain, England, Brittany, and Menorca, and I also share Mr. Shannon's apparent interest in sun/moon behavior and artwork incorporating their existence (although this has no applications in the **Four Corners Project**). But Mr. Shannon's described project mentions 50 some points and alignments and my objective has been to marry the most with the least. That is, to use the fewest sided solid with the most sided. From what I have read in the supplied articles, his objective is essentially quite different.

This entire confrontation reminds me of the lovely paradox of Johannes Kepler, the seventeenth century scientist. As I recall, his great vision was based in the faith that the six planets then known were functioning according to the paths described by the nested five platonic solids. He designed elegant models of this theory. He felt he had uncovered the "Cosmic Mystery." But of course in his lifelong search to prove his vision he found only contradictory information. Kepler, however, respected the truth over his own invention. In so doing he established scientific method.

I wish Mr. Shannon well with his work and the completion of his project. I am continuing to work on mine. I feel the world will respect and enjoy whatever similarities or differences may emerge. This painful trauma perhaps has potential for being an odd confirmation of our individual visions.

David Barr

January 12, 1982

Dear Stewart Brand,

Thank you for sending a copy of Barr's letter.

I believe my gallery has sent Robert Horvitz slides of the first corner as it was installed next to the Metropolitan Museum in New York, 1976. I've enclosed one slide of a globe, Instrument of Coincidence (1974), used to determine locations for the corners. A second slide shows a cube circumscribed by Earth; one corner is enlarged.

Barr may think coming in seven years late is "simultaneous" and "this entire confrontation" may remind him of "the lovely paradox of Johannes Kepler" but for me he's muddying the water with a redundant subset of a complex work I continue to build.

Thank you for offering to print pictures and my irate letter.

Thomas Shannon
Los Angeles, California

Arguing about who was first seems so tacky in a magazine devoted to idea-sharing. But we can't expect to continue drawing top talent from fields like art where originality has premium value, if we don't give credit where credit is due. That said, the ideas underlying both artists' corners are surely worth expressing more than once. Let's thank both of them — Tom first.

Robert Horvitz
Providence, Rhode Island

A Part

Quintessential Wendell Berry — poems so essenced they approach elixir. Tempting, tasty, life-giving.

—Stewart Brand

[Suggested by M. Morford]

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Wendell Berry
1980; 99 pp.
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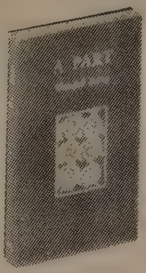

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Stay Home

I will wait here in the fields
to see how well the rain
brings on the grass.
In the labor of the fields
longer than a man's life
I am at home. Don't come with me.
You stay home too.

I will be standing in the woods
where the old trees
move only with the wind
and then with gravity.
In the stillness of the trees
I am at home. Don't come with me.
You stay home too.

Symbol Sourcebook

Fascinating. This comprehensive dictionary of wordless words is a delightful browse and an invaluable reference, especially if you're making up a new symbol or trying to understand an old one. The symbols are grouped by use — folklore, meteorology, traffic, etc. — but there is also a shape index in the back. The compiler is old master designer Henry Dreyfuss. *—Stewart Brand*

[Suggested by Jim Baldwin]

The Wavelength

Unlicensed and illegal "free radio" stations have played a prominent part of the antinuclear/green movements in Europe, publicizing local pollution problems, nasty development plans, and protest rallies. No comparable phenomenon has occured in the U.S. yet, though pirate stations (mostly teenage parodies of AM rock stations with more giggling and obscenity) were popping up all through the seventies. The Free Radio Campaign was organized three or four years ago to publish news about pirate radio, frequencies and schedules, technical tips, personal confessions, equipment sought or offered, photos of station setups, tales of busts, etc. An interesting scene, still groping for justification. *—Robert Horvitz*

The Wavelength
Al Muick, Publisher
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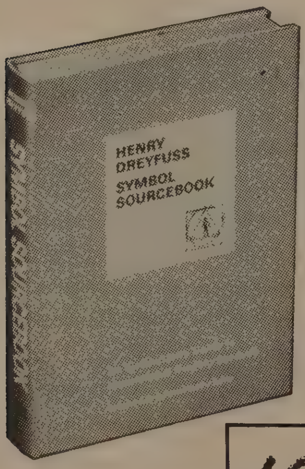
Third Operations Battalion
U.S. Army Field
Station Augsburg
P.O. Box 1912
APO, NY 09458

•

Radio Delmare lost their ship (the 5th one) in a pre-sailing harbour raid in Holland. The pirate TV ship ODELIA, anchored near the Voice of Peace in the Mediterranean, has been there since April. Radio Caroline's American backers gave a big press conference and promised an Easter return — SILENCE! Then in early September they gave a big stateside champagne party and promised a restart at the end of September — SILENCE! Dutch/British (ex Caroline guys) project for Radio Pheonix (British) and Radio Monique (Dutch) to share airtime 50/50 has collapsed due to shortage of cash and aggro with the ship's owner. The ship CEDARLEA was bought by (surprise! surprise!) the conservation group Greenpeace to become the third ship in their fleet. CEDARLEA is now in London for restoration and the original Greenpeace ship RAINBOW WARRIOR is in North America/Canada for a new campaign. The famous radioship MEBO II has completed its contract with Colonel Kadaffi of Libya and is reported to be sailing for Europe!



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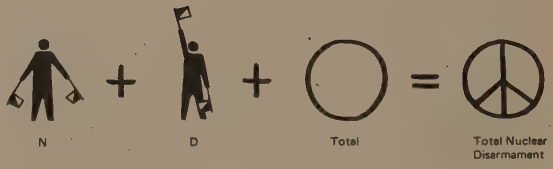
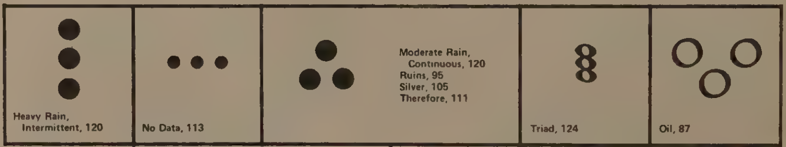
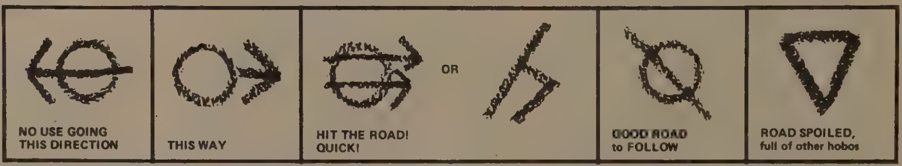
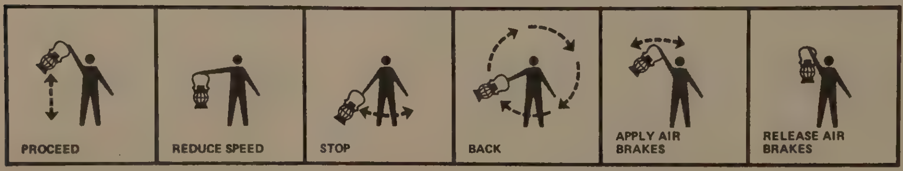





NO USE GOING THIS DIRECTION
THIS WAY
HIT THE ROAD! QUICK!
OR
GOOD ROAD to FOLLOW
ROAD SPOILED, full of other hobos



Cheap libraries

I have in mind to write a short piece for you about cheap libraries, but I have so much else to do that I can't imagine when I can get it done. So ask Anne Herbert to put her brain to work on the problem — how could we run useful libraries for a tenth (or less) of the cost of present libraries? Why do they have to employ Ph.D.'s in "Library Science"? What the hell goes on in a library that any half-smart child or adult couldn't learn on the spot in a matter of months? How much does a typical library system spend on filing and keeping track of books? What does that work out to, per book? My guess is that it comes to many times the cost of the book itself. What sense does this make, especially for the ephemeral, non-reference books that make up the bulk of any library's collection? Why not have a few books, valuable books, reference books, that you keep careful track of, and for the rest, use the honor system — say to people, for every book you bring back you can take a new one out.

See, there's half the article already.

All for now,

John Holt
Boston, Massachusetts

Koh-I-Noor 983 pencil sharpener

Here's a nice device for sharpening pencils. Draftsmen all know about it, but most workaday pencil pushers don't, from what I can see. They use some variation of the less-efficient variety sold everywhere to "laymen," designed with the assumption that a single blade applying an equal amount of torque simultaneously to both wood and lead will cut a nice point. Sometimes it does, but really it breaks the lead far too often. This sharpener has three blades (all replaceable), one for the brand-new pencil, one for the lead, and one for the wood sheath. It will never break the lead. A rare example of a tool designed for pros that's available at a nonpro price. —John Green

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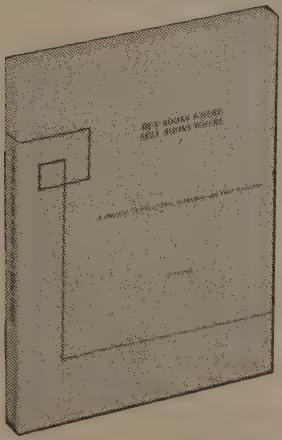

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GOOD MOVIES

by Sheila Benson

59
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ATURITE
44

Personal Best

Quest for Fire

Missing

El Salvador: Another Vietnam

PERSONAL BEST is a bold, beautiful, and sensual film whose theme, a rite of passage, is seen against the background of women's athletics. Written, produced, and directed by Robert Towne (screenwriter of **Chinatown**, **Shampoo**, and **The Last Detail**), it is full of Towne Hallmarks: it is raunchy, topical, and quotable.

It's also a view of the women of women's sports by a man obviously in love with and no little in awe of his subjects. To Towne it's not a big deal that the first stop of Olympic hopeful Mariel Hemingway on her road from innocence to the beginning of maturity involves a love affair with another woman athlete, played by Patrice Donnelly (an actual '76 Olympic team member and once the fourth-ranked woman hurdler in the world). To Towne, sexuality is sexuality and you don't relate love to gender. Before the film is over, Hemingway also becomes seriously involved with a male athlete (Kenny Moore, former Olympic marathoner, now a writer for **Sports Illustrated**). Hemingway's third deep attachment is to her coach, Scott Glenn, the mescal-drinking menace of **Urban Cowboy**, who gets the film's best lines and gives one of its most fiercely realized performances. Hemingway and Donnelly are marvelous, and to bolster the film's realism its athletes are all holders of American and Olympic records. As photographed by Michael Chapman, **Personal Best** gives such sport its fullest visual lyricism since Ichikawa's **Tokyo Olympiad**.

★ ★ ★

I don't know and I don't much care how closely French director Jean-Jacques Annaud (**Black and White in Color**) comes to precise accuracy in **QUEST FOR FIRE**. What he created is so enthralling a speculation on what life may have been like 80,000 years ago that it is possible to surrender to it utterly. See if afterward the film doesn't linger on, making you reflect more than once on how remarkably (unnecessarily?) complex things have come to be since our needs were only food, shelter, and fire.

Purists may object to the remarkable variety of geographical regions within walking distance of this scouting party of three primitive *Homo sapiens*, sent out to regain fire for their tribe. It's a whale of a neighborhood, ranging from the badlands of Alberta to Scotland's Cairngorm and Kenya's Lake Magadi. (Imagine *their* score on CQ's bioregions test.) But these vastnesses add to the film's magical quality. You might object to the mixtures of tribes, too, from Neanderthals to a group patterned on the New Guinea Mud Men, yet it seems integral to the film's composite portrait of early man.

Novelist Anthony Burgess and zoologist-behavioral theorist Desmond Morris collaborated in creating the language used, which is as much animal signs as sound, and the costumers were brilliantly inventive. **Quest for Fire** is violent, in a few places it goes against sensible behavior (would primitives who relied this much on smell enter the winter lair of a family of bears?), and its music seems disappointingly "great-movie music." But its rich and beautiful glimpse of the first civilizing gentleness of our ancestors makes **Quest for Fire** a fine effort.

★ ★ ★

How in the name of all that is military was the U.S. Army dumb enough to let smart documentary filmmakers Nicolas Broomfield and Joan Churchill (**Tattoed Tears**) anywhere near the basic training of peacetime women recruits at Fort Gordon, Georgia? For a demonstration of terrorization, sadism, and verbal abuse, **SOLDIER GIRLS** has no peer.

The film singles out four young recruits, two black, two white, and two white sergeants, one male, one female. One young black woman is a perpetual thorn in the sides of her sergeants, who are determined to wipe the irrepressible giggling smile off her face. An earnest, bespectacled white private is badgered and punished until she breaks down, screams, and possibly assaults her tormentor. Of the remaining two recruits, one begins as a staunch comforter of her fellow recruits and ends, as she decides to stay in the Army, sounding suspiciously more like her superiors every day.

We watch the physical drill and eavesdrop on electrifying lectures like the one on how to survive an atomic blast: "Lie face down, close your legs to protect future generations, and brush or wash off radioactive dust."

Then, unexpectedly, after we have come to loathe one sergeant, he and the recruit who elects to stick with the Army have a relaxed talk. He says suddenly that since Vietnam he feels that his humanity — his soul — has gone forever. The Army is now all he has; he wants a wife and kids but there's no way in the world he can have them; he has no tenderness left to give. It's one of a handful of extraordinary moments obtained by these skillful filmmakers and it makes **Soldier Girls** a film to seek out.

* * *

MISSING is a primer for the kind of American exemplified by Jack Lemmon in Costa-Gavras' film about the disappearance of a young American citizen during the 1973 Chilean coup. Lemmon plays a quintessential successful American businessman who during the Nixon era comes to understand, as he searches post-Allende Chile for his missing son, some of America's dealings in that country's politics.

Missing also marks the Hollywoodization of Costa-Gavras, who has, by the use of Lemmon and Sissy Spacek (as Lemmon's daughter-in-law), gained the attention of audiences who might not search out foreign films. But he has also simplified and sapped the force we usually associate with his name. Nevertheless, Missing is a worthwhile, necessary film even if the pain which comes from it is not so much anguish for the characters as for our country. Seen now with the background of evening news stories announcing our government's increased aid to the military rulers of El Salvador, the film has heightened terror.

* * *

The companion piece to **Missing** might be **EL SALVADOR: ANOTHER VIETNAM**, Glenn Silber's and Tete Vasconcellos's update to their PBS documentary of the same name, broadcast in January of 1981 with the title followed by a question mark. Surer now than ever of the parallels, the filmmakers have dropped the interrogatory stance. **Missing** and **El Salvador** seem like fiction-nonfiction of the same tragedy nine years apart, although the current tragedy is still in the making. Documentarians Silber and Vasconcellos begin with a review of El Salvador's recent history and end with the events up through the late summer of 1981, and include the December 1980 rape-murder of four Maryknoll nuns working in a displaced persons camp. Just as the presses closed, **El Salvador** was nominated for an academy award in the best documentary category along with **Eight Minutes to Midnight** (reviewed in Winter 1981 CQ). Intercutting between now-president Duarte's oily reassurance that there is no repression in El Salvador, only "abuses of authority," and the maimed bodies of peasants, Cardinal Romero, and cabinet members, the film provides clear reasons for mounting feelings of outrage by the U.S. voting public. This, not **Missing**, is the true "must see" film; must see and soon.

* * *

Critic David Denby put things precisely when he described a Sidney Lumet film as one in which a man enters a room shouting, stands there and shouts some more, and leaves at the top of his voice. There certainly is that aspect to Lumet's direction of Ira Levin's hit play of some years ago, **DEATHTRAP**, in which you begin to fear for poor Michael Caine's vocal cords. But if you let yourself get beyond that, there is ingenious fun to be had, of the "I just wanna have a good time at the movies" school of moviegoing. The plot in Jay Presson Allen's adaptation is as intricate as Portuguese lace and I wouldn't reveal it for the world except to say that Caine, Christopher Reeve, Dyan Cannon, and Irene Worth are wickedly good as a quartet of sophisticates and eccentrics drawn together by a love of mystery.

* * *

I suspect that **DINER**, the sleeper of this bunch, may spark the same innocent sense of joy and longing that **American Graffiti** did. If you've been watching carefully, you've seen its principal actors before: the remarkable Mickey Rourke was the bomb-maker of **Body Heat**, Daniel Stern was the gawky member of **Breaking Away**, and Steve Guttenberg was as bad in the unlamented **Can't Stop the Music** as he is fine in this. The enterprise which brings them together is an artless but gentle return to writer-director Barry Levinson's home turf and the fateful December of 1959 in Baltimore just before the Baltimore Colts met the New York Giants for the National Football League championship. Having reached their early 20s, the five main male characters are (somewhat) geared to face Life, Marriage, and Responsibility, 1960s style. But first, a renewal of camaraderie in an air of anticipation in and around the diner. Wonderfully funny, fresh, and inventive, **Diner's** affection for its characters permeates every moment of the picture, and the performers are absolutely fine.

* * *

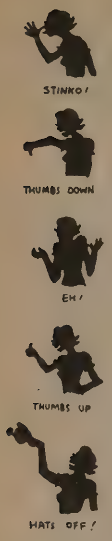
You wouldn't even have to love dance to be fascinated by director Carlos Saura's film of **BLOOD WEDDING** as interpreted by Antonio Gades' flamenco ballet company. Opening as the dancers file randomly into the rehearsal hall and closing with the last, bloodstained moment of the ballet itself, this dance version of Garcia Lorca's great tragic play succeeds beautifully as a marriage of film and dance.

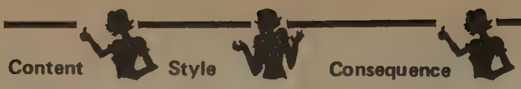
It is fascinating at the opening to watch a flamenco rehearsal, to discover that the women can drop their haughty stances and giggle like any other dancers over a missed cue, to hear Gades' odd exhortation to his troupe, "Make the kidneys bear it," as he leads them in their run-through. And Gades' choreography at the ballet's end, in which his dancers' movements put their duel into slow motion, playing with time, lengthening it as seems to happen during a crisis, seems even more effective caught by the camera than by our eye on the stage. ■

Deathtrap

Diner

Blood Wedding





The Progressive

This is the only magazine I subscribe to. I'm not crazy about the new layout, but the investigative reporting remains superb. It makes **Mother Jones** *look silly, although I have infinite respect for the work* **Jones** *is doing. I have long felt that* **Jones** *looks right on the coffee tables of hip lawyers' and dentists' offices, but* **The Progressive** *floats around in the homes of more serious, quieter folk. Their writing is like a friend telling you something — a bit too earnest but always drawing you out. I always read it from cover to cover. A curious fact: this magazine began in 1909 and has held practically from day one a constant subscription list of 30,000, varying less than a few thousand since then. People die and are born and 30,000 keep subscribing.*

—*Terry Lawhead*

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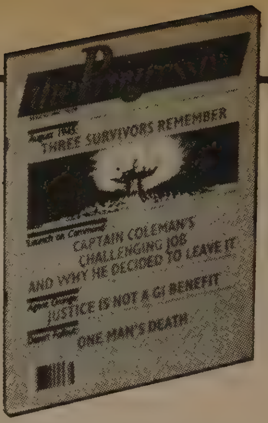
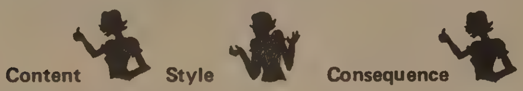

the Progressive
THREE SURVIVORS REMEMBER
CAPTAIN COLEMAN'S CHALLENGING JOB AND WHY HE DECIDED TO LEAVE IT
JUSTICE IS NOT A GI BENEFIT
ONE MAN'S DEATH

•

There was considerable skepticism among Coleman and some of his fellow Strátegic Arms Command computer analysts as to the real need for some of the future weapons systems — the B-1 bomber, the MX missile — that their elaborate computer studies were intended to justify. "I often did a little unauthorized analysis on the side, showing that we really didn't need this system or that one. Normally, the response I would get from our director would be, 'Gee, that's nice, uh-huh' — and that's as far as it would ever get.

"Everyone in my branch had a graduate degree in mathematics or engineering or computer science. I can't think of one of them who bought what SAC was saying publicly about the need for new weapons systems. There were a great many doubts."



re:sources

Aptly titled, this is the publication of the Environmental Task Force, an organization which is attempting to network among grassroots and national environmental organizations. **re:sources** *reports on local efforts across the nation, covering campaigns which range from resisting dam projects to profitable recycling programs to the struggle to maintain some black ownership of agricultural land in the South. It's a wide spectrum of concern, and the stories do provide a rough outline of homegrown winning strategies. All in all, a very useful tool for developing a collective consciousness in the environmental movement or for providing an introduction to the movement. Only trouble is, it's a little bland. The writing lacks tooth, and the copy's not proofed. That might change after* **re:sources** *hangs in for a while.*

—*Stephanie Mills*

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Bettina Conner, Editor
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1346 Connecticut
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Suite 918
Washington, DC 20036

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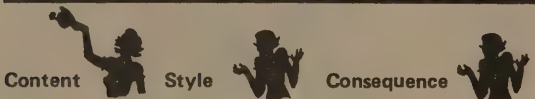
Last summer in Egypt's Ridge, West Virginia, police arrested a farmer for shooting at a helicopter that was spraying the herbicide 2, 4-D onto his land.

Despite the protests of the pilot of the aircraft, and the utility company that employed him to douse the Ridge with 2, 4-D, a dioxin derivative, in their yearly effort to clear powerlines of vegetation, Bob Welsh was acquitted.

"This was clearly a case of self-defense," said the judge. "Any reasonable person could have felt threatened."

Following the incident, Welsh became something of a local hero. Public opinion grew, and within several months West Virginia became the first state in the nation to pass regulations restricting the use of herbicides for rights-of-way maintenance.



The Comics Journal

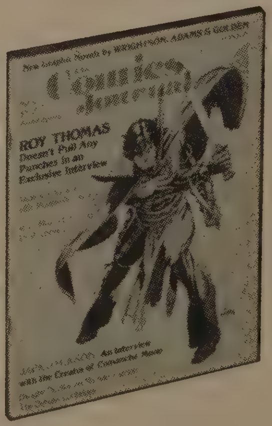
The comic-book business is first and foremost a ***business****. Whatever our sentimental allegiances to Snoopy, Popeye, or the Amazing Spiderman, cartoons are also lucrative properties owned by corporations, produced by teams, and licensed out to movies, manufacturers, and ad agencies.*

Beginning as a fanzine, the **Comics Journal** *has grown over the last few years into a thick, monthly trade journal which keeps constant tabs on comics as commerce as well as popular entertainment. Editors Gary Groth and Dwight Decker are still fans enough to care passionately about such news, and accordingly the bulk of* **CJ** *is long comic reviews and interviews with various professional cartoonists and editors.*

For a behind-the-scenes glimpse at the people who make Superman fly, **CJ** *can't be beat. Though I don't read many comic books these days, I do read the* **Comics Journal.**

—*Jay Kinney*

Comics Journal
Gary G. Groth, Editor
$14.95/year (10 issues)
from:
Fantagraphics
196 West Haviland Lane
Stamford, CT 06903


Comics Journal
ROY THOMAS Doesn't Pull Any Punches in an Exclusive Interview

Content **Style** **Consequence**

Christopher Street

Since 1976 **Christopher Street** *has been a touchstone of gay culture. Monthly, it features gay humor, fiction, poetry, sociological and psychological studies, and "think pieces," written by the likes of Tennessee Williams, Andrew Holleran, and Seymour Kleinberg. The magazine mirrors cosmopolitan gay consciousness and, by providing a forum, helps to shape it. It studiously avoids direct politicking, preferring to assume its right to exist rather than defending it. This assumption is* **Christopher Street***'s greatest political act. Despite constant monetary difficulties, this magazine is not shy. And by adopting a slick format (à la the* **New Yorker***), it refuses to be lost amid dozens of small-press newspapers.* **Christopher Street** *seeks to propel gay hope and intelligence to the media forefront.*

—Larry Frascella

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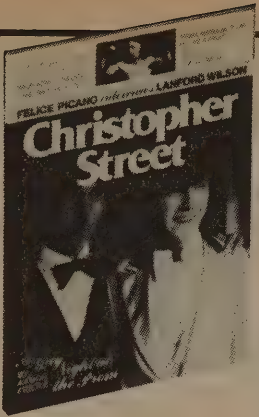
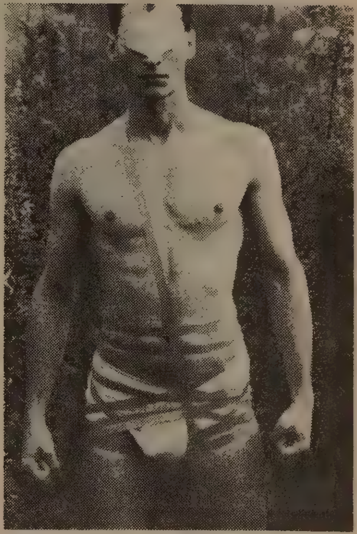
Until about 1970, biographers found it is difficult to explain this curious but amazingly successful little man. Just what did he *do* with those street boys he so obviously adored? And what creative powers did he draw from them? What gave him the courage to expose the padrone system of indentured slavery which was smoothly run by an 1870 version of the Sicilian Mafia? Strange doings for a puritanical Unitarian minister with a Phi Beta Kappa from Harvard! A man like that is supposed to sermonize virtue in respectable surroundings, and not collect a bunch of throwaway slum kids and do something about it. But Horatio Alger did a lot.



Christopher Street
Charles L. Ortleb, Editor
$24/year (12 issues)
from:
That New Magazine
Suite 417
250 West 57th Street
New York, NY 10107



"I'd have to define myself as homosexual, first, a fetishist, second, and a sadomasochist, third."

Content **Style** **Consequence**

Callahan's Irish Quarterly

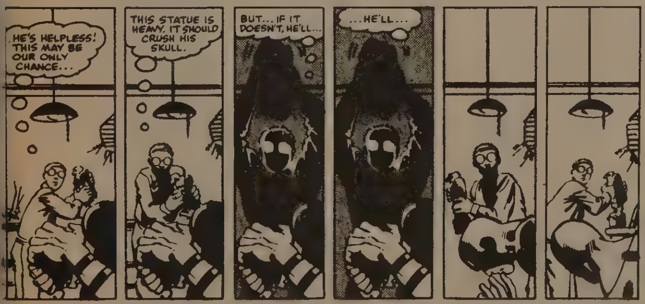
The premier issue of this one caught a few eyes around here, what with O'Neill, Ryan, Campbell, Kinney, Gallagher, and Phelan in the office. For starters, its state-of-the-art production quality left everyone wondering where Bob Callahan (a main force behind the fine Turtle Island Press, reviewed in the Winter '81 **CQ***) got the dough. Editorially, it's Irish to the bone: propagandistic, full of itself, a product of inbreeding. Don't look here for reporting. Do look here for Irish cultural notes delivered from California with a distinctly pro-IRA bent (though the first issue is somewhat balanced by an interview with the Supreme Commander of the Ulster Defense Association.) And do look here for reviews and fine examples of contemporary Irish writing — Nell Lawlor, Robert Kelly — complemented by such answering voices from across the Atlantic as Ishmael Reed's "Black Irishman" and "The Ultimate Irish Joke" by our own Dan O'Neill,* **IQ***'s "Perspective" editor.*

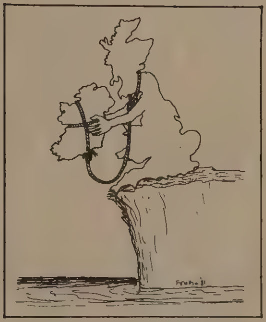
How Irish is the **Irish Quarterly***? You'll genuflect between articles.* *—Joseph Aloysious Kane*

Callahan's
Irish Quarterly
Bob Callahan, Editor

$12/year (4 issues)
from:
Callahan's Irish Quarterly
P.O. Box 5935
Berkeley, CA 94705

If fear is the only motivation of an impulsive violent act (even self-defense), and allowed a moment of reconsideration, it will usually destroy the emotional nerve needed for such action.


HE'S HELPLESS! THIS MAY BE OUR ONLY CHANCE...
THIS STATUE IS HEAVY. IT SHOULD CRUSH HIS SKULL.
BUT... IF IT DOESN'T, HE'LL...
...HE'LL...



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The reason the Irish live in history, I have come to conclude, is that history has yet to release them. The younger modern Irish woman may very well drive about Dublin, or San Francisco, in her new Toyota, with a packet of birth control pills in her purse, on her way to her executive job in the financial district; she might, but she still has one foot nailed directly to the seventeenth century. Or the sixth century.

HOW I BECAME A HUMAN BEING

by Mark O'Brien
Photographs by Betty Medsger

WHEN I WAS about ten years old and growing up in a South Shore suburb of Boston, my family and I packed ourselves into our station wagon and headed north for a brief vacation in Quebec. I had never journeyed so far from home, but I remember that the trip was fairly pleasant and that we arrived at our motel east of the city of Quebec a little after sunset. The shape and the colors of the landscape were the things which impressed me the most. The hills were much steeper, the houses were painted brighter and, in general, everything seemed to be more intense in La Belle Provence than they had been in New England.

One day we went to visit the massive Gothic Cathedral of Ste. Anne-de-Beaupré. The grey solidity of its mass dominated the surrounding land in much the same manner as its ancestors must have dominated the fields of medieval France. Inside the cathedral there were signs printed in French and English which forbade the use of cameras. There were also many photographers busily taking snapshots of the statue of Ste. Anne.

But the thing I recall most vividly is the enormous stone wall covered with casts, crutches, and various devices associated with illness. All of these things, we were told, had been discarded by people who had made the pilgrimage to the shrine of Ste. Anne, had prayed with devotion to the saint and had sprinkled themselves with the holy water which was available there. I realized then that the purpose of the trip was not to see the red-jacketed Canadian soldiers in the Citadel or the Canada Dry bottling plant in downtown Quebec. The purpose of the trip was to find some means whereby I could get out of the terrible bind which polio had put me in. All my limbs and my trunk were paralyzed. Only my head could move. As my parents pushed my little hospital cot around the church, both of my eyes were filled with tears. To think that all of these strangers should be praying for me, that my parents should have gone

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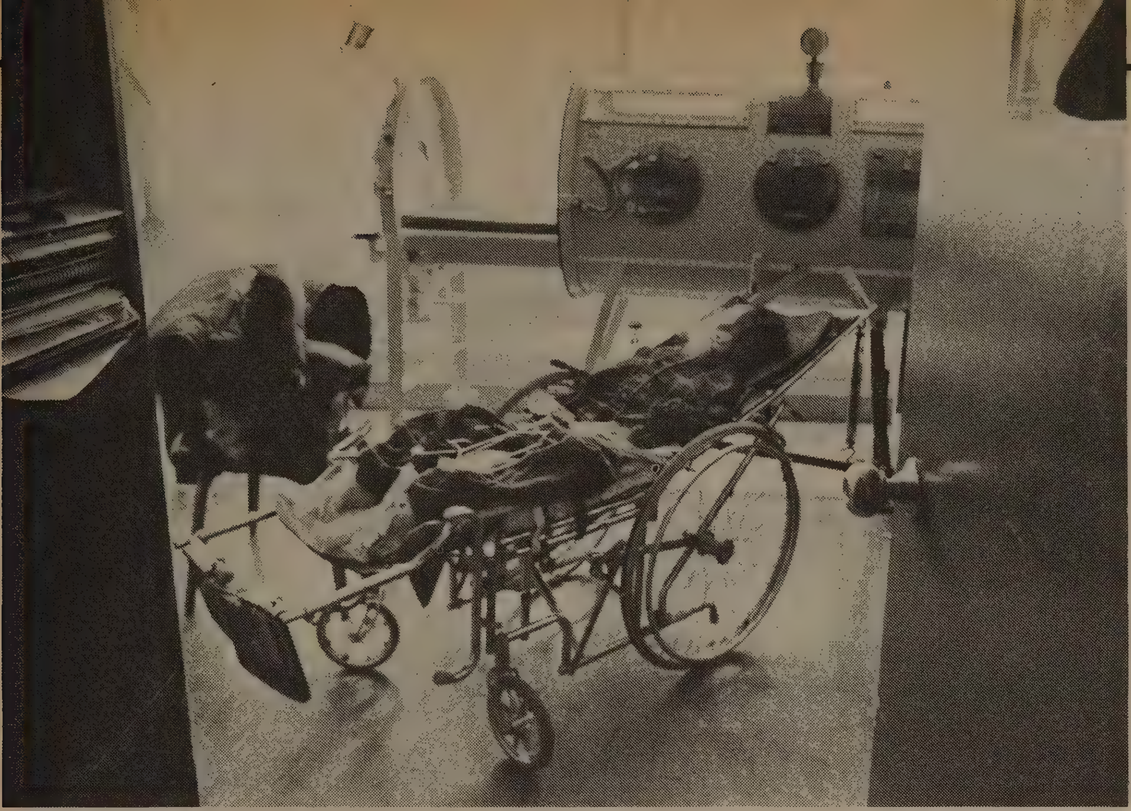
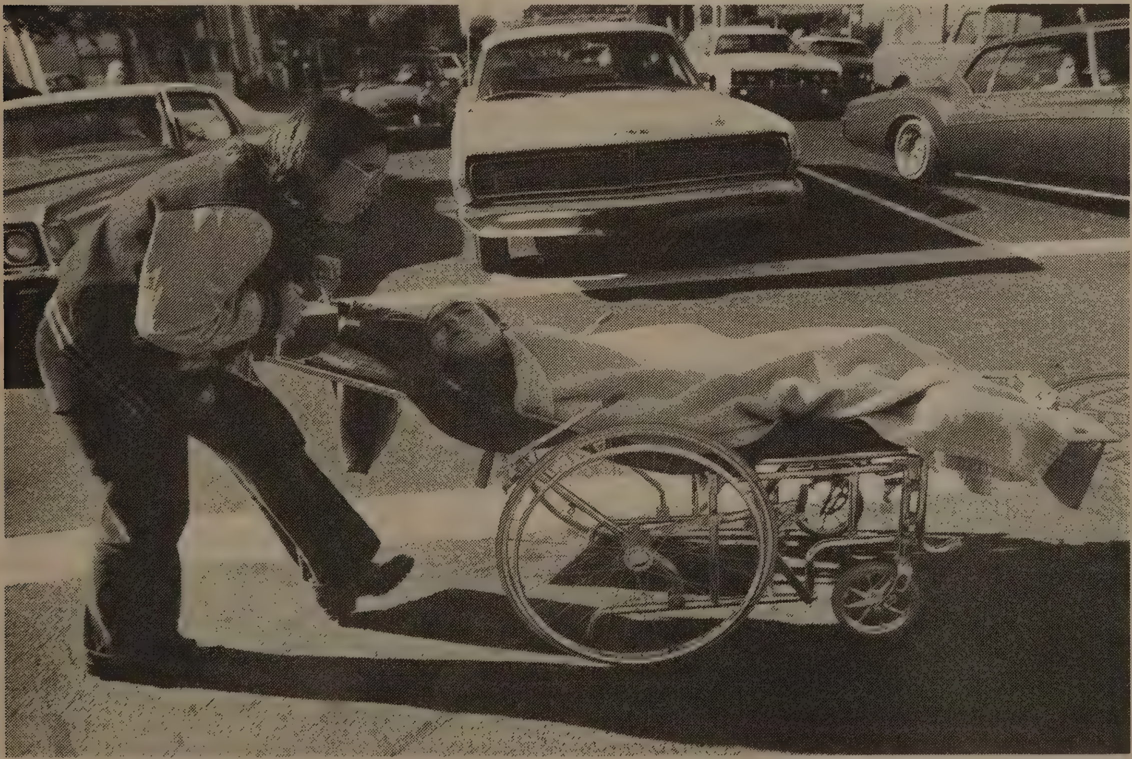
Residents of Berkeley, California, get used to seeing people in wheelchairs because Berkeley welcomes the disabled into everyday school and work life. Even so, when I was a student there three years ago, there was one man who appeared so disabled that he startled nearly everyone at first – and inspired a lot of awe and admiration besides. He was Mark O'Brien, who turns out now to be one of CQ's more accomplished writers. He dictated this article into a tape recorder in August 1980. His friend Barbara Belding transcribed it and suggested he send it our way. He graduated in December 1981 from the University of California at Berkeley with a B.A. in English, and he's looking for work and further training in journalism.

The article gives several good reasons why disabled people should be part of mainstream life, but there's one more it doesn't mention. Part of becoming a human being for me has been (slowly and painfully) learning to be human with groups of people, like the disabled, who initially make me uncomfortable. That's not possible unless I see them in daily life. Shutting them away diminishes the humanity of the rest of us.
–Art Kleiner



My iron lung and I took up residence in a dormitory at the University of California in Berkeley in the fall of 1978. I was told I'd be "on my own" here. I wasn't sure what that would mean. I was 29 when I came to Berkeley. Until that time I had been a child of my parents, dependent on them at home, and a patient of doctors and nurses, dependent on them at hospitals.

That fall I hired attendants for the first time, including Christien Bagley, who pushed me to class. The state of California provides money for disabled people to hire attendants, something that turned out to be very important for me. It felt much better being an employer who hired attendants to ***work*** for me than being a patient who waited for nurses and others to ***care*** for me. The government spends considerably less when I live on my own and hire attendants for basic needs than it spent to keep me in a hospital. In the bargain, I also learn to control my life.



through the trouble and expense of bringing us all up here and that this entire religious enterprise was directed towards people like me was more than I could bear. My mother asked me if I was all right. I nodded because I couldn't say anything. I knew that I did not deserve all of this love and energy. I knew that I was severely disabled and therefore of very little worth in the world. I also knew that I would remain severely disabled for the rest of my life, miracles being few and far between.

Today, 21 years later, I am a reasonably happy, reasonably busy 31-year-old student at the University of California at Berkeley. I am reaching the end of my junior year and will, with some grace and fortune, receive an A.B. in English at the end of 1981. My chief worries right now are whether I shall qualify for graduate school, which graduate school I shall enter, and what kind of work I shall do after I am finished with school. I still am as paralyzed as when I was a child. I still cannot sit up straight, turn my head to the left or sleep outside of a respirator. But these problems no longer set me apart or mark me as a freak as they did when I was a child and an adolescent. The reasons for this change have more to do with the nature and the quality of society than they have to do with me. In particular, they have to do with how much responsibility a society will entrust to disabled people.

When I was a child, I had very little responsibility entrusted to me. That is the way it is with most of us. Liberal economist Dr. Paul Samuelson tried to counter the conservative slogan "There ain't no such thing as a free lunch" by asserting that we all received free lunches when we were children. But I am sure that Dr. Samuelson must have known, even as a child, that those lunches were not totally free, that he had to treat his parents with respect, be a good boy, and in all manner live up to the terms of the parent-child contract which had been imposed upon him at birth. At least, that's the way it was with me up until the time when I contracted polio. And for many years after.

A SHARP, PERSISTENT PAIN in the gut kept me awake one night in September of 1955 when I was six years old. My parents telephoned the family doctor, who came over immediately and recommended that I should be taken to Boston Children's Hospital. I was to spend the next two years in hospitals, becoming well enough to be outside of a respirator but never regaining the use of my limbs. During this time I had to submit myself to the wills of the doctors, nurses, and therapists. This was a new kind of relationship to me because it demanded stricter obedience than my parents had expected and also because it involved very little love. For these two years I lived in terror of the tyrannical doctor and the short-tempered nurse. They controlled every aspect of my life and the only relief which I could find was in the visits of my family and the work of the hospital volunteers. I remember at one point pulling the sheet up with my tongue and my teeth so that it would cover my head. I was so frightened by my surroundings that I didn't want anyone to see me.

That is why I looked so eagerly ahead to the day when I would be discharged so that I could live with my family. My parents were provided with the equipment and the training they needed to take care of me at home. And life at home was pretty good; I can't complain. Of course, like every child, I had to do what my parents told me to do. But it was a lot easier than the hospital. I spent my days with my brother Ken and his friends watching them play the kind of games boys play. Sometimes my mother would push me on my little hospital cot to the vacant lot where the kids played baseball and football. I liked the arrangement and I did not want it to change. I did not want to go back to the hospital and I did not want my parents to get any older. My life had found a calm center and I just wanted it to stay there.

But it didn't. It couldn't. My family and I moved from Boston to Sacramento in 1966. I thought at first that things would remain pretty much the way they had been, but they did not. I studied at home on my own and received a high school equivalency degree in 1968, when I was 18, which was about the time that I began to notice that it was hurting my mother to lift me. To keep from hurting her, I began to spend more and more of my time in my room reading, watching television, and listening to the radio. Except for medical appointments, I never left. Meanwhile, my brother Ken was studying at Sacramento State College, participating in the debate team, traveling all around the country and winning trophies which covered a mantelpiece. I was not jealous of him; I could see, however, as I was getting deeper into my twenties, that life was passing me by. I could also see that the blistering Sacramento summers were taking a toll on my parents. The extent to which they worked in the heat frightened me.

I think that the day in May of 1976 when my brother graduated from a nearby law school was the time I finally became convinced that I had to get out, that I had to get away from home. My family went to the ceremonies and left me behind to read Aldous Huxley's **Doors of Perception**, listen to baseball games, and await their expected return around four o'clock. Having gotten wrapped up in the celebrations of the day, they did not get back till after seven, by which time my only desires were to urinate and go to sleep. That summer I prayed intensely to the Lord for some

I enjoyed my classes, particularly those where ideas were discussed. Until I left home at age 27, I had virtually no contact with peers, except my brother. For the first year at the university, all I wanted to do was study. I didn't see the point of socializing.

kind of release from this embarrassing and uncomfortable situation – from my physical dependence on my parents.

Meanwhile, without my knowing of it, my parents were working toward that end. They had read a story in the **Sacramento Bee** about the Physically Disabled Students Program (PDSP) of the University of California at Berkeley. My father contacted the local office of the California Department of Rehabilitation, but the people there were of little help. So he raised hell with the department at the state level and finally succeeded in getting an appointment to see Ed Roberts, the director of the Department of Rehabilitation. It was Ed and his mother, Zona, who launched me on the course which would take me to Berkeley. At that time, Zona Roberts was the director of the dormitory program at PDSP. She suggested that I should go into a hospital so that I could be physically rehabilitated before I entered Berkeley.

I did not think that this was possible. I thought that everything which could be done to improve my health had been done at Children's Hospital back in Boston. The day I left home and went to Kaiser Hospital in Vallejo, California, was a sad one for me. I had never thought I would leave home. I was sad to leave my parents but I felt it was a necessary step toward finding a future of my own. I thought this might be a new start for me; maybe the people in Vallejo could help me.

Kaiser Hospital was entirely different from any hospital I have ever been in, before or since. The building was sleek and modern, the staff aggressive and hardworking. The thing which surprised me the most at the time was that they had developed a new form of physical therapy, proprioceptive neuromuscular facilitation (PNF), which seemed to have some effect on me. This form of therapy emphasizes avoidance of pain and the use of crushed ice to stimulate blood circulation. It is a radical break with earlier schools of physical therapy and seemed to be much more effective than other kinds. I felt stronger every day. But there were no obvious, measurable effects of this, except that I was able to stay up in my wheelchair for two or three hours at a time, something I had never been able to do before.[1]

The other difference in this hospital was less obvious but perhaps more important. I was encouraged to take responsibility for keeping to a schedule which was attached to my wheelchair every morning. The schedule had a list of all my

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1. Kaiser Hospital is the only facility in the world that gives extensive training in PNF. They will refer prospective patients to the nearest available graduate. Write Kaiser Foundation Rehabilitation Center, Attn: Rehab PT, 975 Sereno Drive, Vallejo, CA 94589. There is one book for PNF practitioners, very technical and difficult: **Proprioceptive Neuromuscular Facilitation** by Margaret Knott and Dorothy E. Voss; 1968, 2nd Edition; $30 postpaid from Harper and Row, Mail Order Department, 10 East 53rd Street, New York, NY 10022.

appointments with a space for the person who was supposed to sign. If I missed an appointment, the schedule would not get signed. This forced me to get rides to my appointments from every possible source, including even doctors. The therapists told me that if the nurses could not get me to therapy I was entitled to yell at them. I was very busy at that place; each weekday I had two trips to physical therapy, one to occupational therapy, one to the teacher to whom I dictated some short stories, and a weekly visit to my social worker in her office. I don't know whether it was the PNF or the intensive activity which made me feel so exhilarated. All I knew was that I wanted to stay there.

One day the social worker (whom I shall call Brenda) took me outside in my newly acquired wheelchair. It was my first wheelchair; until then I had been on a hospital cot. She sat down on a bench and talked with me about my future. She said that I could not stay at Kaiser, that such a stay was not a part of the plan (whatever that was) and that I could make things a lot easier for her if I voluntarily went to Fairmont Hospital, a county long-term-care hospital. She said that it also had therapists trained in PNF, that it was either in or near Oakland, and that if I didn't like it I could ask the social worker at Fairmont to arrange transportation back to Kaiser. Contemplating Brenda's large brown eyes, I decided to make things easy for her. Besides how could I miss with a money-back guarantee like that?

IT WAS STIFLING HOT when the ambulance I was riding in pulled up in one of Fairmont's parking lots. I noticed that some of the windows in the buildings had air-conditioning units in them. For a Sacramentan, that was bad news. It meant that there was no central air-conditioning. But there was more bad news to come. The inside of Fairmont was dark and crowded, with walls painted in sickly, pale shades of green and yellow. The plumbing and the electrical wiring were on the outside of these walls, not neatly tucked away inside them.

When I got to my room, the ambulance attendants plopped me down upon a bed whose mattress was as soft as a marshmallow. The people at Kaiser had always preached the virtues of lying on hard surfaces to strengthen back muscles. Most of the room was to my left, so I couldn't see it. All I could see was an enormous yellow cylinder filled with compressed air. The cylinder was attached with tubes to something in the bed next to me. I couldn't see the thing on the bed because it was covered over with a sheepskin. I could just see part of it slowly rising and falling. Occasionally, a nurse would come along and pour some brown liquid into another plastic tube which she would hold aloft like the Statue of Liberty. Later I found out that my neighbor was Michael Sipos, a bank officer whose brain had been injured in an automobile accident.

There was nothing to do except try to become a accustomed to the heat and the lethargy of the place. There seemed to be *very* little happening. Patients talked about going to therapy maybe once or twice a week, not every day as I had done at Kaiser. The staff seemed to be about twice my age and rather spooky – interested primarily in furniture, their ex-husbands, and their own ailments. All this I might have been able to endure were it not for the fact that some of the nurses were willing to dish out small bits of cruelty to show me who was boss. At my first opportunity I had someone take me to a telephone so that I could call my mother and beg her to call Brenda at Kaiser so that I could get out of that awful place. I am afraid that I upset my mother terribly and after that the nurses were more careful about taking me to the phone. A few days later the doctor for my ward told me flatly that there was no way that I could go back to Kaiser.

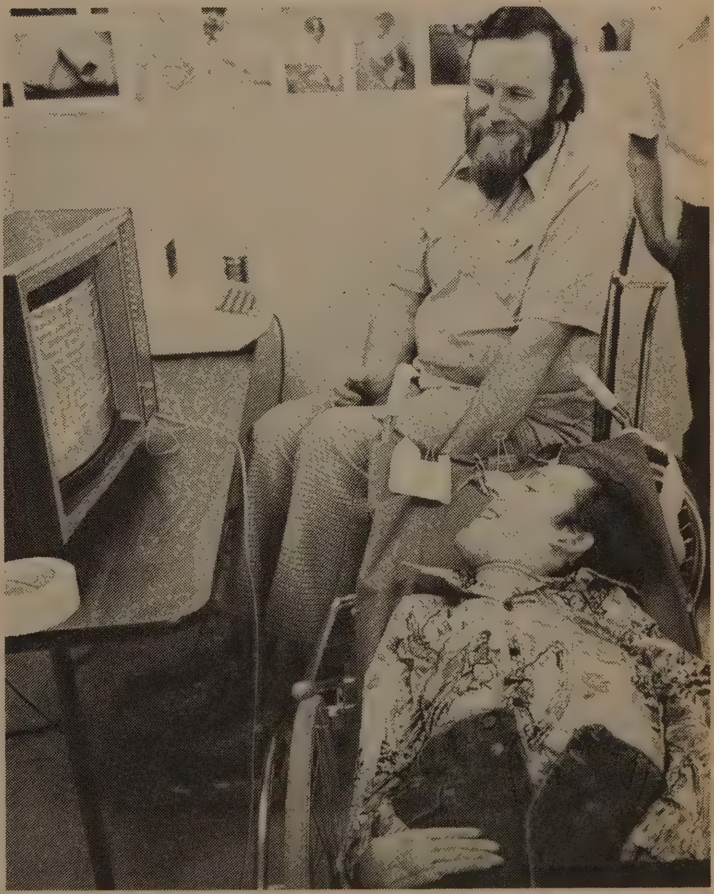
I don't know how I survived my first three months there. The two things which saved my sanity were California State University at Hayward, and a typewriter. My association with Cal State began in January of '77 with the beginning of winter quarter. Students were paid by the state to tape record the classes I had signed up for and to bring the tapes to the hospital. This way I got to meet Bay Area people who were not associated with the hospital.

When I was given an opportunity in the summer of '77 to attend some classes in person, I grabbed it without consulting any of the authorities at the hospital. I would take one or two classes on campus and one or two by tape at the hospital. Going out to Cal State reinforced my sense that something was wrong with the hospital. In class, the professors would treat me with deference as an interested, older student. After taking the 15-minute ride back to the hospital, I felt like Cinderella after midnight. Now I was something that had to be put to bed and fed. When one of my English professors talked about the schizophrenic lifestyle of Theresa Dunn, the protagonist of **Looking for Mr. Goodbar**, I told him that such a divided kind of life was familiar to me, that it was, in fact, the way I lived.

And in between classes there was the unstructured, lighthearted life of campus. I would usually be fed lunch by my attendant in the disorderly and boisterous atmosphere of the disabled-student center. The people there would talk about movies, parties, anything except the hospital. That was what I wanted, the illusion that I was free of the the hospital.

Of all the disabled people I knew in Berkeley, I was the only one who couldn't operate his own chair. I felt peer pressure for the first time. I hired an attendant to take me to Stanford University, where some rehabilitation engineers, over a period of a year, modified an electrically powered chair for me. To make the controls, they had to figure out what strength I had. I doubted whether they could make my meager strength useful. Except for moving my neck from front to right side, the only movement I have is in my left foot and my left knee.

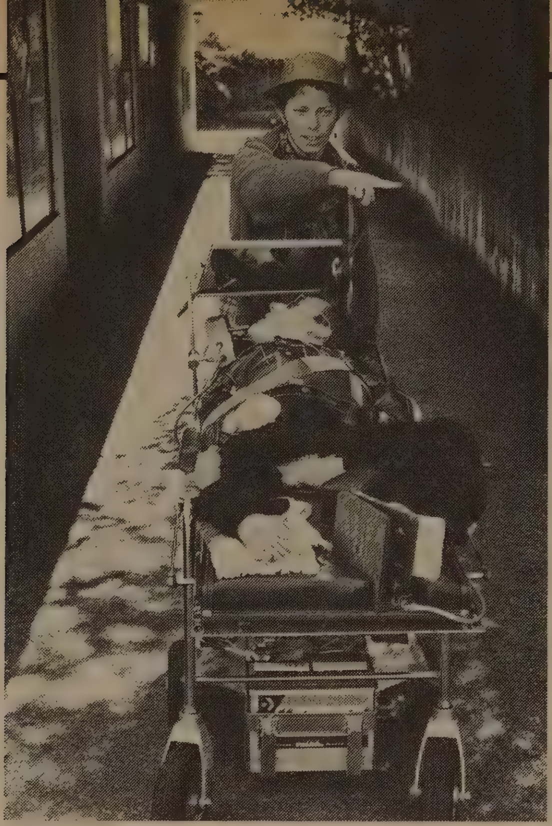
They tested several devices. One day, by raising and lowering my knee a very short distance, I was able to move a dot through an electronic maze. If that was possible, they said, I could move through the streets. But there were no cars or people in the maze.



The typewriter was something which my occupational therapist acquired for me in April of '77. It had a pair of microswitches which were placed above my chin. After my wheelchair and the switches had been positioned properly, I could operate the typewriter by hitting one switch with my chin. This would set off a series of high-pitched beeps which could be turned into low-pitched beeps by hitting one of the microswitches again. Every character on the keyboard was electronically associated with a certain pattern of beeps. In this way I could type out whatever I wanted, albeit rather slowly. And since the typewriter was downstairs in the occupational therapy department, it gave me an excuse to stay off the ward for most of the day.

Meanwhile, my physical rehabilitation was not coming about. I received physical therapy once a day, and although my therapist had been trained at Kaiser, she could not keep me going at the Kaiser pace because, under pressure from the chief of physical therapy, she had to cut back on my therapy. If I wasn't getting any better, Medi-Cal, the state health insurance program, would not pay for my therapy. I did feel better, but Medi-Cal's idea of "better" was that it should be possible to measure my progress in such terms as "can now raise arm; could not before." I just felt better, something that can't be measured.

So I spent the next two years concentrating on my



When I got my new chair, I had to learn to operate it. One of my attendants, Mary-Lea, volunteered to be my driving instructor. We practiced in parking lots and then on the sidewalk in front of my apartment. Through a series of mirrors — a large one above my head and two fisheyes on my right side — I am able to see an area of nearly 360 degrees. But I had to learn to judge distance perspective, different in each mirror. At first, I was exhausted after only a few minutes of practice. What with me getting exhausted quickly and the chair breaking down, it took several months before I had enough skill and confidence to go on the street alone.

studies, typing, and occasionally having pleasant chats with my physical therapist. After a year, near the end of a session of therapy, my physical therapist told me that she would not be able to work with me any more. She told me that if I were able to go to Berkeley and get an electric wheelchair it would probably be better for me than any therapy she could give me. As she left my bedside she patted me on the shoulder and I cried a little. I cried because I was losing a good friend and, at the same time, losing my last hope for physical rehabilitation.

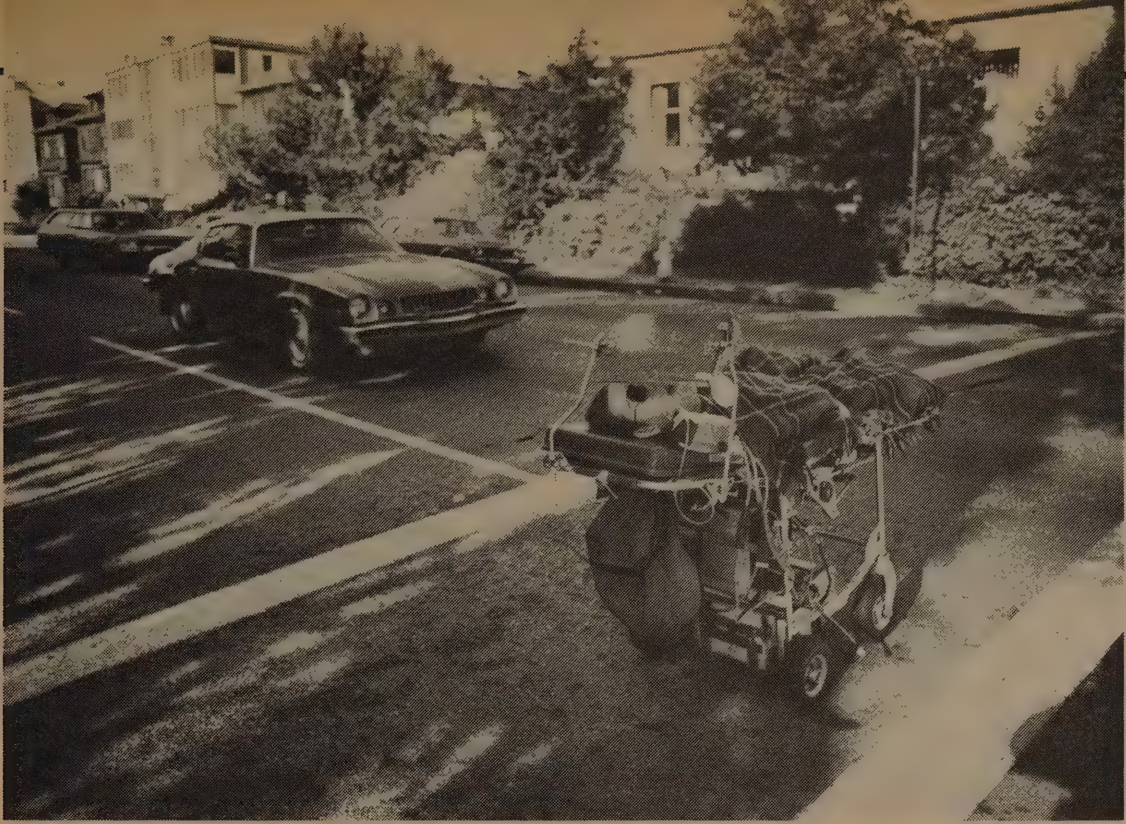
My trips to the occupational therapy department were my source of friendship and support. Shortly after I got the typewriter my occupational therapist, Linda Panikoff, looked at my typing and said, "I'm tired of seeing song lyrics. Why don't you do something creative? Write me a novel." So I wrote her a novel. At least I tried to. I also wrote letters, one of which, addressed to a doctor I knew at Kaiser, begged for readmission. When my social worker at Fairmont found out about this she became upset. But the vote of the Kaiser admissions committe had been close; I had almost been readmitted. It had been worth the effort.

Through all of this time I felt as if my life was being controlled by some external force, some mysterious "they" who wanted me to stay in Fairmont until I was "ready" for Berkeley. I had no burning desire to go to Berkeley; I liked Cal State a lot. But I gradually came to see that the only way I could get out of Fairmont was to gain admission to Berkeley. The doctor would only let me leave the hospital on the condition that I enter a situation which offered 24-hour-a-day care. This is what the Berkeley dorms offered. I would live in my own dorm room and hire attendants, but there would be staff available through the night downstairs if I needed help. In June 1978, after a year and a half and three applications, I was finally accepted. The nurses were surprised. They didn't think that a person like me could live on my own. Even my doctor was surprised, but because the dorm program met his standards, he had no reasonable excuse to keep me out of it.

A BROWN VAN ROLLED into one of Fairmont's parking lots and took me away from that place. It took me 15 miles to Davidson Hall, one of the UC dormitories. The trip was brief and pleasant. I felt like a prisoner who had just been released. My elation was tinged with a mistrust of the reality I was experiencing; something this good couldn't be happening to me. I could not believe it was actually happening until we parked outside the dorms. There were attendants there, two per shift. They didn't wear uniforms like nurses did and they told me that the dorms were not a medical facility. But still, I tried to evaluate the place the way I would evaluate a new hospital. I wanted to know which attendants were helpful and which were not.

I soon discovered, however, that this was beside the point. I was expected to hire my own attendants and to pay them with the money which the county gave to me. The attendants whom I hired treated me better than the nurses had because they worked for me and not some institution. Because they worked for me I had to see to it that they were competent and reliable. I dreaded the day when I would have to fire one of my attendants. I didn't want to do that. But when one of them refused to come to work or even talk to me on the telephone, I fired him right away. But good attendants (and they were the majority) were a pleasure to work with. My morning attendant, Gifford Swanson, invited me over to his place for Thanksgiving dinner, and my school attendant, Mary Lea, performed so many acts of kindness for me that it is difficult for me to cite just one.

She also taught me how to drive my electric wheel-



Now I "walk" alone. I take myself to class. It takes me longer to get anywhere than it takes a walking person. But I get there, and I get there when I want to get there. I hire no attendants now to move me from place to place. With each step in my independence, the government saves money.

Once I misjudged a curb. The chair toppled and I fell out of it, bruising my knee and my ego. I was scared, but I knew there was no turning back, that it was unacceptable not to power my own chair. I drove alone as soon as my knee healed. I recently learned that some strangers refer to me on campus as the guy who goes to class on his bed. And someone, describing my moving along alone, was quite sure that the chair was operated by remote control, that I couldn't be in control of it. I am.

chair, a task which required enormous patience and keen perception on her part. It was difficult because I had to navigate by looking in a mirror that was placed over my head. She couldn't see what I saw and couldn't see where the wheels of my wheelchair were. I controlled the direction of the chair with a lever under my left foot. To go sharply to the right I would push my foot down all the way. To go to the left I would take my foot off the lever. To control the speed of the chair I had a lever under my left knee. To make the chair go full speed I would lift my knee off the lever. To make it stop I would put my knee down on the lever. There were switches next to my chin which enabled me to put the wheelchair into reverse or to turn it off. It took me more than six months to learn how to drive the thing and more time to gain the confidence I needed to drive by myself. Her perception enabled her to imagine herself in my place and her patience enabled her to endure my rudeness and stupidity.

Because I was, for the first time in my life, essentially on my own, I had to learn how to run my own life. I had to take responsibility for maintaining my health, keeping track of my money, and battling the institutions which were designed to help me.

STANFORD UNIVERSITY was one of these institutions. They had contracted with the California Department of Rehabilitation to convert an electric wheelchair so that I could use it. For several months I made the 50-mile trip to Stanford, expecting a chair I could drive. The trips were long and exhausting and very little progress seemed to come out of them. At one point, I grew impatient and telephoned one of the rehabilitation engineers at Stanford and asked him why things were going so slowly.

"Well, we're not sure you really want the chair," he answered blandly.

I was furious! For years I had been trying to get a workable electric wheelchair. And now these guys wanted me to beg them, pretty please, to give me the chair. I knew that I was a customer, that they were the merchants, and that I didn't have to put up with this kind of crap.

"Do I have to kiss your shoes?" I asked before I hung up. By this time I had stopped being a patient who accepted whatever was done or not done for me. I had become a person needing and buying services.

I knew that it was a difficult engineering project, designing and making a wheelchair for someone who couldn't move their arms or legs. I never understood the technicalities involved, but I was determined that they should not treat me as if I were a patient.

The day I finally took delivery of the chair was very exciting. I had to go to Stanford to get some final work done on it. When that was completed they told me that I could drive it on my own. I drove unsteadily into the reception area, afraid that I might hit a man in a wheelchair. When I somehow managed to miss him, doors were opened for me and I went down a curving path with adequate skill but overriding terror.

This was the way I continued to feel when I began learning how to drive with Mary Lea. I had never been responsible for my own personal safety before, at least not since I contracted polio. Now there would be no one around to help me if I made mistakes. All my mistakes would be my own. Mary Lea sensed my fear and suggested that I go on a series of extended trips by myself. On the Fourth of July she said that I should try to go to Shattuck Avenue and to the Center for Independent Living (CIL) by myself. I was afraid of going to Shattuck Avenue, even though it is only three blocks west of where I live. (By now I was no longer living in the dorms but had an apartment of my own.) I did not want to disappoint her, though. So I headed off for Shattuck Avenue.

It was a long trip on a narrow sidewalk with bushes and plants brushing against my wheelchair. There were strange buildings all around and I knew that it would be difficult to get any help here. I had to stop before I got to the next cross street because there was a hole in the sidewalk covered over with boards. There was also a sofa and miscellaneous bits of furniture cluttering up the sidewalk. I just had to sit and think about the situation for ten or fifteen minutes. Finally, I decided that there wasn't enough room to turn around, so I went straight backwards until I reached a driveway where I could turn around. That journey wore me out with fright and I went straight back to my apartment.

I rested for about a half an hour. Then, bored with my inactivity, I went off to the Center for Independent Living, which was only a block away, toward the east. As I crossed the broad expanse of Telegraph Avenue, I marveled at my power to bring cars and buses to a halt. I drove up on the parking lot of CIL and stayed there for about ten minutes. Because it was a holiday there was nobody working there, so I decided to go home. When I later told my mother about the events of that day, she called it my "Independence Day."

Another institution I had to deal with was UC Berkeley, which proved to be more tractable. I took just one course during the fall quarter, but two during the winter quarter, and three during the spring quarter. I spent all of my time studying, eating, or sleeping, but the grades I received never seemed to satisfy me. They were mostly Bs with a scattering of As and Cs to give the mix some dash. But going to school itself was fun. I got to move around, hear some interesting lectures, and meet some people. One of my classes was a seminar which included only eight students. I arrived in the classroom early one day and was by myself when two of the other students entered. They were involved in some silly dispute and when they began to argue about which of them "should go to the nuthouse first," they asked me to arbitrate the matter, hailing me as "Oh, model of rationality." I had seldom been referred to in such flattering terms. It was because of incidents like this that I gained the strong impression that I had taken control over my life and that I was doing something of value with it.

I sensed that other people understood this and respected me for it. And strange to tell, they began to treat me as if I were a human being. It's strange to tell because up until then people had made me feel as if I were something else, something less, something not capable of bearing personal responsibility. Because this society has, by unspoken agreement, defined a human being as someone who can bear the major responsibilities required for a self-directed life, I was not a human being. Nor are convicts, children, or retarded people regarded as such. But now that I have been given this responsibility and have proven that I can run my life as well as anybody else, I have been granted that degree of respect which is commonly accorded to a human being. When one of my attendants referred to me as "buddy" it thrilled me because I had not been accustomed to receiving that degree of respect. Such respect came as something of a surprise.

ANOTHER SURPRISE which has come my way is that the federal government is cutting back on the money needed to fund independent living projects. That means cutting back on disabled people being able to become human beings. These projects help people like myself get out of untenable positions of dependence in homes, hospitals, and nursing homes and into the world so that they may be full participants in it. The programs do this by providing the help needed to find a place to live. They provide the names, telephone numbers, and qualifications of attendants to the people who need such information. They provide a spectrum

In addition to getting around on my own, I know people now. Peers, the sociologist would say. Friends, I say. I'm just as likely as any other person to be going across campus and have someone call my name. One of my most important discoveries since being on my own is that I've discovered that people can like me. It's good being a human being.

of services which include transportation, wheelchair repair, and career and academic counseling. In short, they provide all of the services which a disabled person *must* have available if he or she is to live independently.

Berkeley has more support services for disabled people than any city I know of. But Berkeley cannot be expected to be a refugee camp for all of the disabled people in the United States. There must be independent living projects in other parts of the country so that disabled people can live, work, and study wherever they please. It is difficult to make the leap from hospital to university or from hospital to private apartment. Most communities have not expected disabled people to live on their own; they have expected them to remain dependent on aging parents or other relatives or to be institutionalized. Independent living projects can give these communities the chance to deal with disabled people in a more human and effective way.

A cutback of federal funding of independent-living-for-disabled-people centers will force state and local governments to spend more money on hospitals, welfare payments and other debilitating, dead-end programs that keep people alive but don't permit them to really live. Not only are these programs ineffective, but they also cost the public a great deal of money. My stay at the Fairmont cost over $5000 a month. I didn't pay for it; taxpayers in general paid for it. The money I receive now that I am living on my own comes to only about $1000 per month and I am living much better than I did at the Fairmont. Though my physical condition is the same now as then, I was a patient there, and a person who hires help here. Independent living not only helps disabled people, it also saves the public money.[2]

I have been told that many people in medicine and education are ignorant of the very concept of independent living for disabled people. They shouldn't be. It's essential. From my own experience I can say that once a person is forced to take responsibility for his own health, he will take better care of himself. This runs counter to the idea expressed by my doctor at the Fairmont: that disabled people should be placed in hospitals where they will be forever taken care of. They will certainly be taken care of, but they will not be taking care of themselves. And the act of taking care of oneself not only improves one's physical health, it also improves one's mental health. It even leads people to come to believe that they are human beings. ■

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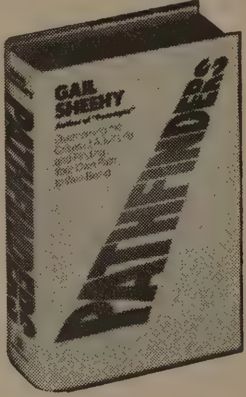
2. Community people trying to start independent living projects can write the Center for Independent Living, Senior Deputy Director Judy Heumann, 2539 Telegraph Avenue, Berkeley, CA 94704. Disabled people looking for referrals to independent living projects in their areas can write the CIL Intake Department at the same address.

Pathfinders

Very handy book if you're having a life. It collects, in semiscientific semijournalistic manner, data and anecdotes from people who manage their lives exceptionally well. The author of **Passages** *is particularly interested in how they manage their mid-life crises. I read the book through and now go around saying that older is better, risk furthers, and the rich think in decades.* —*Stewart Brand*

Pathfinders
(Overcoming the Crises
of Adult Life and
Finding Your Own
Path to Well-Being)
Gail Sheehy
1981; 493 pp.
$16.95 postpaid from:
William Morrow and Co.
Wilmor Warehouse
6 Henderson Drive
West Caldwell, NJ 07006
or Whole Earth
Household Store



●

Given the contemporary cultural tilt, "purpose" is the one element you or I might both have predicted as crucial to life satisfaction. Yet the results were dramatic: The greater the well-being person reflected, the more likely he or she was to have an outside purpose. The distinction is so considerable that it makes the current pop philosophy of looking out for Number One sound like a national suicide pact.

●

The rich think in decades. Poor people think about Tuesday all day Tuesday.

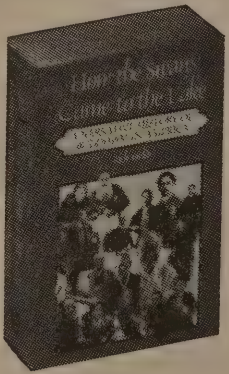
●

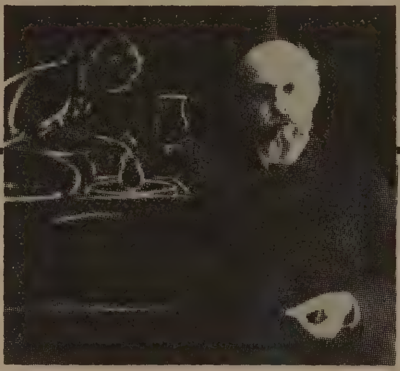
The women who go off the charts in happiness are middle-aged; just past menopause; friends with, but unconfined by, their now-grown children; and feeling a firm sense of their own identity for the first time. In general, being older correlates with being less bored, less lonely, more in control of one's inner needs and outer environment, and more likely to report no major fears.

How the Swans Came to the Lake

Author Rick Fields claims this book grew out of the Buddhism survey he did for **The Next Whole Earth Catalog**. *Nonsense. It grew out of the realization that Buddhism was rejuvenated when it traveled from India to China (and rejuvenated China in the process), was rejuvenated again when it traveled from China to Japan (and rejuvenated Japan), and is being rejuvenated again by its current move to America. This is a chronicle of that latest double whammy — a very significant book about a very significant transmission.* —*Stewart Brand*

How the Swans Came to the Lake
(A Narrative History
of Buddhism in America)
Rick Fields
1981; 449 pp.
$12.95 postpaid from:
Shambhala Publications
P.O. Box 271
Boulder, CO 80302
or Whole Earth
Household Store





Edward Morse at the blackboard

●

In 1878 Fenollosa's Japanese students were eager to have him expound Hegel and Spencer, while Morse found it "delightful to explain Darwinian theory without running against theological prejudice as I often did at home." In fact, the new doctrine of evolution was grasped quickly by the Japanese, and one of Fenollosa's students, Inouye Enryo, a Buddhist scholar and Pure Land priest, would soon make use of it to argue that Buddhism was more suited to the modern world than Christianity. "To Inouye," writes George Sansom in **The Western World and Japan**, "the Hegelian dialectic was analogous to the analytic logic of the Tendai sect, and the doctrine of Karma (which had attracted T.H. Huxley's attention) was an anticipation of the development hypothesis then finding favor in Occidental countries. With regard to Christianity his line of argument is that any form of theism must be unacceptable to Western philosophy and science. Therefore Christianity is false, but Buddhism is true."

Anti-anti-infant reading

Dear Mr. Brand:

The strident and almost hysterical tone of the letter from Mayra Bloom printed in the Winter issue of **CoEvolution Quarterly** attacking the review of **How to Teach Your Baby to Read** by Glen Doman [Spring '81 **CQ**] bears conviction most probably based on a total ignorance of what Mr. Doman says in his book and, by her admission, no practice in the use of his techniques. Even she concedes that many children are ready to read at age three. Most school systems do not teach reading until age six. For a three-year-old child, age six is a lifetime away.

As the father of two children, both of whom were first exposed to reading through instruction based upon Mr. Doman's techniques with additional emphasis on phonics, I heartily recommend the book. One child learned rapidly at age two, and the other at age four. They both now read considerably better than their contemporaries and enjoy reading. It is true that at least a part of their pride and enjoyment in their ability to read well was triggered by the praise they received for learning and that this praise was generated by the joy we experienced as they learned to read. That Mayra Bloom conceives this to be bad is inexplicable.

The damage done to children of which she speaks comes not from overemphasis on reading but from (1) *failing to make learning fun;* (2) *failing to keep sessions shorter than the child's attention span;* and (3) *failing to accept the limits of the child's abilities at the time.* If one wants a child who is happy, who is thrilled with the joy of exploration of new ideas and who is closer to them, then they should read Mr. Doman's book. Teach your child to read early so he will be going on adventures of the mind when most other children are confined to watching TV. . . .

James L. Fuqua, Jr.
Hendersonville, Tennessee

CoEvolution Quarterly — Winter 1981 Financial Report

EXPENSES	Aug, Sept, Oct	Nov, Dec, Jan
Salaries & Fees		
Office	$ 21,419.83	$ 26,158.62
Production	10,215.05	12,814.58
Editors	13,664.27	18,180.34
Contributors	6,955.00	7,700.50
Office rental, materials, etc.	15,230.05	21,456.27
Phone	1,875.73	2,103.17
Promotion	11,830.38	4,669.11
Printing	31,241.92 (47,000 copies)	41,998.27 (41,000 copies)*
Subscription process & mail	15,983.02	16,108.53
Shipping	1,347.03	1,363.86
Business reply	1,200.00	1,515.00
Refunds	200.00	200.00
Other products (posters, maps, T-shirts, retail Whole Earth Catalogs)	5,916.39	4,383.24
Total	$137,078.67	$158,651.49
INCOME		
Subscriptions, gifts & renewals	$ 94,031.62	$100,070.80
Retaining, sustaining & maniacal	-0-	1,690.00
Back issues	2,314.75	2,374.43
Distribution	17,448.22	20,452.46
Other products (posters, maps, T-shirts, retail Whole Earth Catalogs)	9,857.67	37,879.72
Total	$123,652.26	$162,467.41
NET GAIN OR (LOSS)	**($13,426.41)**	**$3,815.92**

*2000 of these were given to Planet Drum

POINT Financial Report

	Nov, Dec, Jan
CQ (see left)	
Income	$162,467.41
Expense	158,651.49
NWEC (1st & 2nd Editions)	
Income (royalties)	26,188.54
Expense (production)	9,928.08
POINT	
Income	1,300.00
Expense	2,965.94
TOTALS	
INCOME	$189,955.95
EXPENSE	171,545.51
NET GAIN OR (LOSS)	**$18,410.44**

Point Balance Statement 31, January 1982

Assets	
Cash in bank	$ 9,510.11
Investments	64,186.46
Accounts Receivable Distributors	34,574.66
Inventory	
Back issues, CQ	209,581.20
Other products	8,090.89
Liabilities	
Accounts Payable	-0-
Subscriber Liability	316,584.00

Thank you, please

In one of my all-time dumb moves, a year ago I discontinued Retaining and Sustaining Subscriptions, imagining that **The Next Whole Earth Catalog** *was going to score big and we could retain and sustain ourselves. Yeah, well, and ha. In the real world the 510,000 copies of both editions of the new* **Catalog** *look to be doing just a little better than breaking even, and I'm back with hat in hand and crow in mouth and a busker's rap: "Help keep street theater alive, folks. Help disintermediate show biz. A little trickle-down in the hat, a little monetary supply goes a long way here at the edge of the economy. None of your clink; let's hear it rustle."* —*Stewart Brand*

Maniacal
Subscribers ($1000)

Bamboo Flying Water
New York, New York
Donna Boyd &
Gene Combs
Lexington, Kentucky
Marlon Brando
Beverly Hills, California
Stephen & Julie Briggs
Brattleboro, Vermont
Robert Dunn
Sparks, Nevada
Allan Hogle
Gualala, California
Michael O. Johnson
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Launceston, Cornwall
England
Douglas Martin
Sausalito, California
Norman Pease
Orinda, California
Ron Pruitt
Davis, California
Katherine W. Tremaine
Santa Barbara,
California
Greg & Pat Williams
Gravel Switch,
Kentucky
and 5 anonymice

Sustaining
Subscribers ($100)

David Baird
Lancaster, California
Wendy & Joel Bartlett
Los Altos, California
Mrs. Arthur Brand
Rockford, Illinois
Arthur Hayssen
Sebastopol, California
B. Kliban
San Anselmo, California
Roy Rappaport
Ann Arbor, Michigan
Evan Solley
Portland, Oregon
T. Winsberg
Boynton Beach, Florida

Retaining
Subscribers ($40)

John A. Schumaker
Rockford, Illinois

The Retaining Subscriber list includes only those who became retainers since the last issue, as of 2/5/82. Retaining and Sustaining Subscribers get their magazine delivered first class (airmail) for a year. Maniacal Subscribers get CQ for life. Each of the donation amounts are tax deductible.

"Or Whole Earth Household Store"

That phrase under access information in the **CoEvolution Quarterly** means you can mail order the item from:

Whole Earth Household Store
Fort Mason Center
San Francisco, CA 94123

All orders: Add $2 packaging and delivery per order.

Rush orders U.P.S. (Continental U.S.): 40 cents additional charge per book. **Foreign orders** (surface mail): 50 cents additional postage per book past the first two. International Registry Insurance (add $3 per order) is recommended. Payment only in U.S. funds on a U.S. bank.

California delivery: Add 6% tax (BART counties 6½%).
VISA/MasterCard orders accepted.
Telephone (415) 441-7250

Do not send Household Store orders to **CoEvolution Quarterly.**

The walk-in Household Store at Fort Mason will be closed until late summer or fall 1982 while it moves to Building F, Fort Mason. Household Store mail and phone orders will continue to be handled as usual.

DAVID BURNOR

The winter's best "awwww" for us has been an Anna's hummingbird nesting on the back deck. An atypical January brooder among birds, she built the silver-dollar-sized nest partly of used spiderwebs and camouflaged it with lichen. The coffee-bean-sized eggs we never saw (she remained firmly in the nest despite constant near-sighted birdwatchers), but the two tiny babies inflated like slow motion

CoEVOLUTION

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Kathleen O'Neill
Production Management
Nancy E. Dunn, Anne Herbert
Research
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(stats and halftones)
CTS, San Francisco (display type)
Ampersand, San Francisco
(display type)

Gossip

"It's irresponsible to the subscribers." Paul Hawken was giving us business advice. He was deploring **CQ**'s *habit of losing money — a total of $92,000 in 1981, about $23,000 per issue. (The mild gain shown in the current financial report is an artifact of Christmas, and low, considering.) Yeah, we've been able to make up the difference so far with* **Next Whole Earth Catalog** *sales, but that's not the pot of gold it used to be. At best the* **Whole Earth Catalog** *breaks even these days. (We're getting a lot of copies returned from the Midwest and the South. Reagan country.)*

So we resolved to change our loose habits. How, Paul? "The usual. Lower your overhead and increase your income. Start with lowering overhead because there you have surer control, leverage, and effectiveness. Look at every expense to see that it isn't a questionable assumption which has become codified over time into sacred doctrine. Contraction hurts, but it's preferable to worry."

Accordingly Andrea and Jonathan went on a bust-up-the-bar rampage through our budget and came up with these suggestions that would reduce our costs without reducing our service:

- *Print* **CoEvolution** *on cheaper paper. That could save $5000 per issue.*
- *Use cheaper cover stock. Saves $1600 per issue.*
- *Eliminate the post-paid envelope with the order form. Saves $1500.*
- *Print fewer copies. $1600.*
- *Recycle our computer list every 6 weeks instead of 4 weeks. $1800.*
- *Do less free research for outside inquiries and streamline our complaint handling. Saving significant but unknown.*
- *Do without our annual cost-of-living salary increase until the picture substantially improves. $5700.*

Which to do first? We decided to do them all (except for a proposal to shrink **CQ** *by 16 pages, saving $1800, but at the expense of the customer). Total savings — in theory — $17,200.*

On to increasing revenue. We could:

- *Restore retaining and sustaining subscriptions. Should be good for $2000 per issue.*
- *Make a new "other product." Done: the Devolving Europe Map.*
- *Accept plastic — Visa and MasterCard — on our order form. Done.*
- *Increase subscriptions with an attractive offer. Done: free Devolving Europe Map with sub.*
- *Send out news releases with each issue to sundry media, hoping for secondary press. Stephanie did that handsomely for her "Bioregions" issue. Result: zilch.*
- *Prepare annual index of* **CQ**, *in part to appeal to libraries. In the works.*
- *Try a couple ads. One we did in the* **New Yorker** *cost $375 and bombed (four responses). We're trying a* **Whole Earth Catalog** *ad in good old* **Organic Gardening.**
- *Push for more newsstand, bookstore, and distributor accounts. That's coming. You readers could help.*
- *Uh oh. RENT* **CQ**'s *MAILING LIST. Could make potentially $7500 a quarter, $30,000 a year: significant.*

This one we decided we could do only if we warned subscribers first so they could request not to be included in the rental lists (just check the box on the order form). Also we would rent only to like-minded businesses and causes that **CQ** *readers might be glad to know of. And we would tell all about the secret world of name selling (see next page).*

So, 13-year-old virgin for rent. Very clean. Only $60 per thousand names. Yes that's a bit high perhaps, but virgins come higher in this business, and these are remarkable names. The best.

Other business. Attentive students of our masthead will note that Usual Editor Brand has been elevated to Publisher, thus devoting only half his (my) time to interfering with Editor Kleiner this issue. The plan is to rotate Art Kleiner and Stephanie Mills in the Editor, Assistant Editor roles. Assistant Editor deals with input — the mail. Editor deals with output — the issue. Publisher

gray balloons, their short beaks growing like Pinocchio's nose. Apparently to help hide the nest's location the babies fire their poop a good ten feet horizontally. As we go to press the youths are exercising their wings like mad, which makes sense, considering the glide ratio of a fixed-wing hummingbird. As for momma, female birds do click. Readers, who was Anna?

meddles. With finer-grained attention all round, the reader benefits, and I get half my time freed up to work on another Point project — of which more will be said when there's something besides vapor to report.

Depth on the bench sure is a mind reliever and magazine opener. We have four people around the office who have edited whole issues of **CQ** *and plenty more who could. When Production Manager Nancy Dunn was felled by the vicious 9-day flu, Anne Herbert put down her* **Rising Sun** *pencil, picked up Nancy's pencil, and production didn't miss a step. Beyond "theory Z," holistic management, to Fourier theory, hologram management. Also known as lazy management.*

From Carl Watson in Bay of Plenty, New Zealand comes word that all the **Next Whole Earth Catalogs** *in that country have page 103-104 ripped out. Sex pages? Nope. Dope.*

An oversight in the "Bioregions" issue was our failure to give access on Murray Bookchin's new **The Ecology of Freedom.** *Send your $14.95 to Cheshire Books, 514 Bryant Street, Palo Alto, CA 94301; or Whole Earth Household Store. Which, by the way, is changing its venue to a nearby location (also at Fort Mason Center, San Francisco). It won't be ready for new street customers till fall 1982, but its rapid mail order service will continue the while.*

Readers weary of our antimetric crusade will be relieved to hear that the counter-revolution is over. We won. John Michell reports from supposedly metric England, "Our antimetric campaign has reached the end of its active life with the abolition of the Metrication Board. Nothing essential has been metricated, and for the most part our customary measures are regaining lost ground." Meanwhile the California Metric Conversion Council, on which I serve, has been zero-budgeted after July and will no longer fritter $106,000 a year trying to muster a quorum. And Ronald Reagan, in his only known uncontested budget cut, is doing the same to the U.S. Metric Board. Defunct by September. Over 2 million dollars a year saved.

Never give an inch. Feet got soul.
—Stewart Brand

The Secret World of Magazine Mailing Lists

Magazines have rented their subscriber lists to direct-mail advertisers since the turn of the century, but only with computers has the direct-mail business boomed. As of 1982, 95 percent of the magazines in this country rent their subscriber lists, according to Dorothy Curran, a vice-president of the Saugatuck Group, a direct-marketing consultant firm. Computers have not only made the job of managing and sorting the mailing list labels more effective but have also made it easier for advertisers to target the specific audience they're trying to reach. For instance, there are demographically sorted lists of zip codes that can get merged with a list of subscriber names so an advertiser can reach just those readers of a magazine that live in a certain type of neighborhood. Computers can also pick random samples of a list of subscribers, or select only members of one sex, or test the response of a particular mailing by coding the labels. Two subscribers to the same magazine could receive completely different sets of junk mail as a result.

Direct-mail marketing is a lucrative business, managed by specialists called list brokers who arrange list rentals and help set up computer-based merges. One common merge is to combine mailing lists from several magazines and then weed out the overlap, so subscribers to two or more of those magazines theoretically get only one sales-pitch brochure. Another common sequence is to test a mailing on 10,000 members of one mailing list, selected at random, then add another 25,000, and finally "roll out" a mailing to the full list.

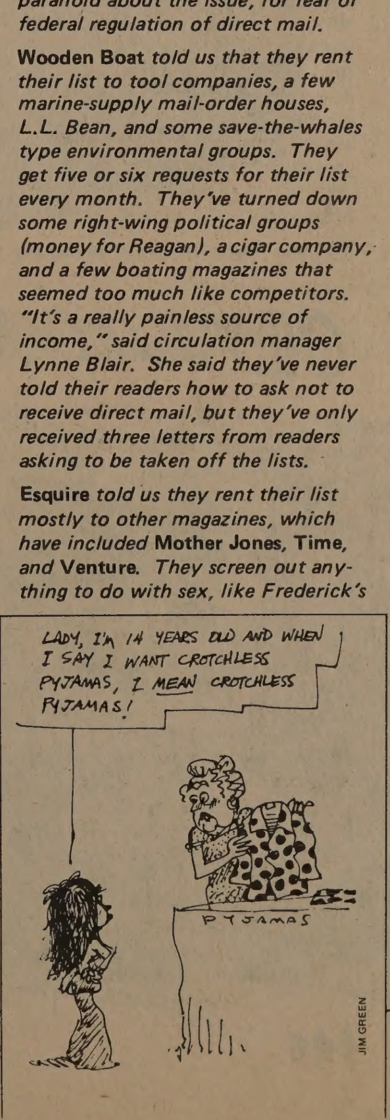
Richard Nilsen called a number of magazines to find out which ones rent their mailing lists, and to whom. Most of the magazines he talked to do rent their lists. Exceptions include mostly the magazines which have a long, steady history — the **New Yorker, Reader's Digest, Sunset,** *and* **National Geographic.** *Even these use their subscriber lists for their own promo mail for books and other products, except for the* **New Yorker,** *which doesn't allow any direct mail to be sent to their subscribers at all. Dorothy Curran said they could easily make a half-million dollars a year renting their list.*

The going rate for most magazines is $40 to $50 per thousand names rented. We got few specifics on how much money different magazines make each year from selling their lists, but **Playboy** *(with more than three million subscribers) told us their annual revenue figure is in seven digits.* **Mother Jones** *makes about eight percent of their total revenue from selling their list. Every magazine is required by an industry self-policing rule to allow subscribers to specify that they don't want any promo mail, and all the magazines we talked to said they check over and approve every advertising piece before allowing it to go out.*

Some magazines were very free with information about their mailing lists; others were guarded. The circulation manager at **Esquire** *advised us not to run any article about mailing lists because readers aren't aware that their names are worth so much money per thousand, and they'd be angry if they knew. Other magazines said the industry has long been paranoid about the issue, for fear of federal regulation of direct mail.*

Wooden Boat *told us that they rent their list to tool companies, a few marine-supply mail-order houses, L.L. Bean, and some save-the-whales type environmental groups. They get five or six requests for their list every month. They've turned down some right-wing political groups (money for Reagan), a cigar company, and a few boating magazines that seemed too much like competitors. "It's a really painless source of income," said circulation manager Lynne Blair. She said they've never told their readers how to ask not to receive direct mail, but they've only received three letters from readers asking to be taken off the lists.*

Esquire *told us they rent their list mostly to other magazines, which have included* **Mother Jones, Time,** *and* **Venture.** *They screen out anything to do with sex, like Frederick's*


LADY, I'M 14 YEARS OLD AND WHEN I SAY I WANT CROTCHLESS PYJAMAS, I MEAN CROTCHLESS PYJAMAS!
PYJAMAS

JIM GREEN

of Hollywood for instance. **Playboy,** *by contrast, said they wouldn't have any objections to Frederick's, but would screen out what they think of as depressing promo mail — such as ads for cancer insurance.*

Blair and Ketchum's Country Journal *takes in a six-digit sum each year from selling their list of 260,000 names, which they sold completely 26 times last year. Since few renters use the whole list, many more than 26 different pieces of direct mail have gone to* **Country Journal** *readers — but no reader has received more than one per week. They run an announcement periodically asking if people want to be removed from the direct-mail list, and only one percent of their readers have so requested. Some* **Country Journal** *readers recently received direct mail from the Children's Hospital of Boston (for fund-raising), from the Environmental Task Force (publishers of* **re:sources,** *reviewed on p. 128 of this issue), and from the National Association of Mature People. They've also sold their list to Time-Life, the Taunton Press (***Fine Homebuilding** *and* **Fine Woodworking***), the* **Mother Earth News,** *the Republican and Democratic campaign committees, Garden Way, RCA record sales by mail, the Audubon Society, and the Franklin Mint. One potential rotten egg they screened out was a company that charged "$7.99 for a lifetime subscription" to a massive direct-mail list. Its subscribers wouldn't find out till later that they were getting a lifetime subscription only to junk mail.*

The **New York Review of Books** *has sold their list to direct-mailers for wine, record clubs, and books. Like* **Country Journal,** *they restrict their sales so that no single subscriber gets more than one piece of mail generated from their list per week. For their own direct mail, they swap lists with a dozen or so other magazines, including the* **New Republic, Saturday Review, WIN, World Papers, In These Times, Foreign Affairs,** *and* **Harvard Magazine.**

Rodale Press *rents the subscriber lists of all their magazines (***Organic Gardening, Prevention, New Shelter, The New Farm, Bicycling,** *et al.) and would tell us only that an editorial committee screens all applicants and rules out promo mail from such companies as pesticide and fertilizer manufacturers. (Later they called us back to request that we not mention their list-renting activities at all. We said we'd think about it.)*

Mother Jones *has rented their mailing list to fund-raising outfits, publishing companies, record clubs, and mail-order collectible companies like the Franklin Mint. They've refused* **Forum** *(published by* **Penthouse***), and their list has never been rented by any right-wing organizations.*

The Taunton Press has never rented their lists but has traded them with other magazines (as **CoEvolution** *used to do). They say they've never rented because it would take too much work and might not make enough money to offset the salary of the person they'd have to hire to do it. They have sold their lists of expired subs, though, which means that subscribers won't get advertising mail until they drop their subscriptions. A few other magazines also only sell their expires;* **Interview** *and* **Scientific American** *are two we talked to.*

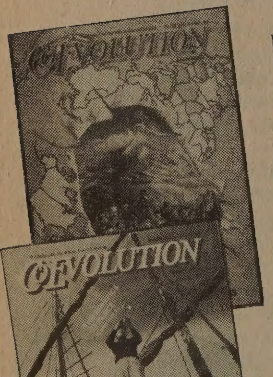
Audubon *has not yet rented their subscriber list, but they said they're considering it. Since they're a nonprofit organization, they'd have to claim their income from renting mailing lists separately, because the IRS has ruled such income as taxable (this will apply to* **CQ** *also). They have swapped lists with magazines and with such mail-order companies as bird-feeder manufacturers.*

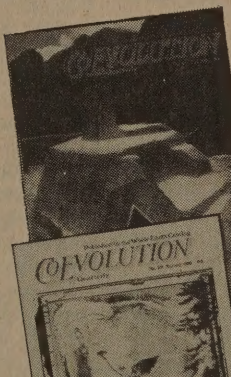
If you want to stop receiving junk mail, you should write to the magazines you subscribe to, but also write to any mail-order companies you've ordered from. They sell their subscription lists as widely as any magazines do, and they'll also stop your name from being sold if you request it. To remove your name from most lists, you can write the Direct Mail Marketing Association Mail Preference Service, 6 East 43rd Street, New York, NY 10017. They catch names at the "merge/purge" stage. Reader Gregg S. Everhart suggests two more addresses: For general mail fraud or mail problems write Consumer Advocate, U.S. Postal Service, Washington, DC 20260. And for avoiding sexually explicit ads send for form OMB 46 R0085 from Director, Office of Mail Classification, Rates and Class Department, U.S. Postal Service, Washington, DC 20260.

—Art Kleiner
[Research by Richard Nilsen]

COEVOLUTION Back Issues $3 each

Back issues are available starting with Issue 14. (Except Issue 27, which was the **Next Whole Earth Catalog** and is not available as a back issue.) The current issue of **CoEvolution Quarterly** is $4.





No. 32, Winter 1981. Guest edited by Peter Berg and Stephanie Mills. Bioregions Special. Articles on ecopolitical decentralism in the U.S., Europe, and Africa; a report on the forced relocation of thousands of Hopi and Navajo Indians; a chapter from Murray Bookchin's **Ecology of Freedom;** regional bibliographies; and contributions by Jan Morris, Gary Snyder, Molly Ivins, and Wes Jackson.

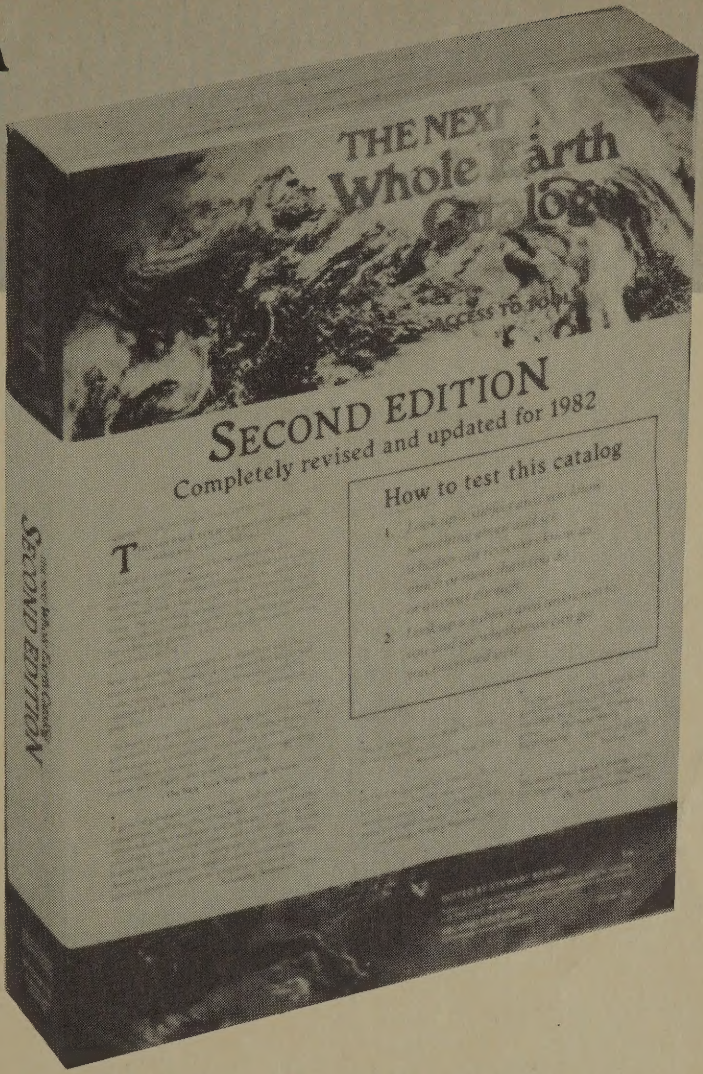
No. 30, Summer 1981. Local politics praised in articles by Karl Hess and Michael Phillips. Inflation exposed as an illusion by Paul Hawken. Also, "How Not to Commit Suicide"; investing successfully with $50 to $5000; making love in space; and coppicing with standards — a method which produces both firewood and timber.

No. 31, Fall 1981. Paul Ehrlich warns social scientists to beware of "physics envy"; James Lovelock elaborates on his Gaia hypothesis. Also, tactics for halting the arms race, Ramon Sender Morningstar and Wavy Gravy on clowning, tree huggers protecting forests in north India and North America, a jogging fantasy, and two looks at the Himalayas.

No. 29, Spring 1981. Robert Frank's first still photographs in years on the cover. Articles on computer slang, homeopathy, the life of a secretary, the solar sail as a cheap way to space travel. Plus Paul Hawken on disintermediation — eliminating middlemen for freedom and security.

THE NEXT Whole Earth Catalog

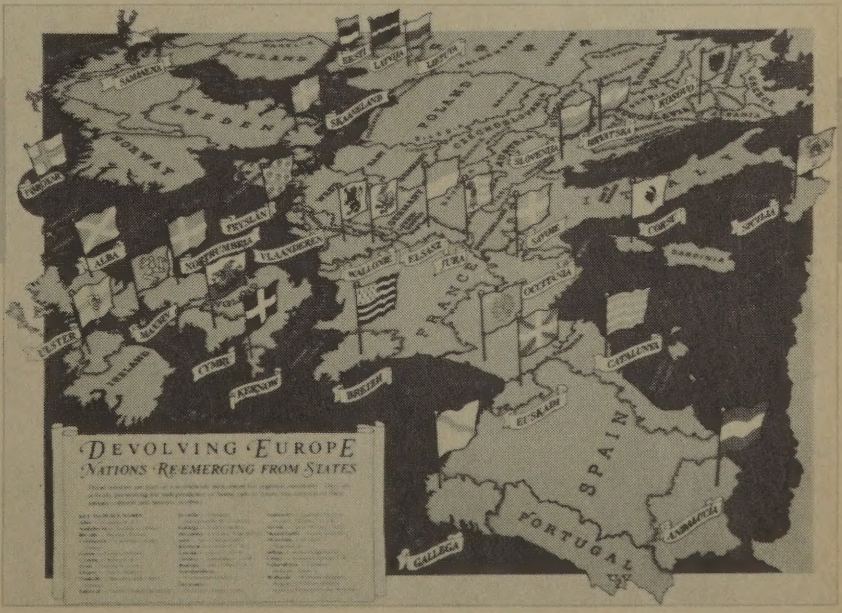
Second Edition
("Nexter Than Next")
$16


THE NEXT Whole Earth Catalog
ACCESS TO TOOLS
SECOND EDITION
Completely revised and updated for 1982
How to test this catalog
SECOND EDITION

Stewart Brand's **The Next Whole Earth Catalog** is back, revised, updated in its second edition, and the big book is once again a marvelous blend of cosmic consciousness and down-to-earth practicality. Larger than a telephone directory, smaller than the Oxford unabridged, the book simply sparkles with bright ideas about tools and how to use them, everything from solar pods to vibrators, wood-burning stoves to shortwave radios, banjos to bookshelf tape, plus a chatty bibliography of several hundred titles on virtually every subject under the sun, from "Harnessing the Earthworm" to "Cybernetics for the Modern Mind."

The new version is not just a cliche or throwback to the halcyon days of counterculture. **The Next Whole Earth Catalog** is a delight to read, an indispensable resource, a treasure trove of ideas, and perhaps the best single tool for surviving the '80s in style. —Ben Reuven
Los Angeles Times

Devolving Europe Map
$5


DEVOLVING EUROPE
NATIONS RE-EMERGING FROM STATES
SWEDEN
NORWAY
POLAND
FRANCE
SPAIN
PORTUGAL
ALBA
CYMRU
KERNOW
BREIZH
VLAANDEREN
WALLONIE
ELSASS
JURA
OCCITANIA
CORSE
SARDEGNA
CATALUNYA
EUSKADI
GALLEGA
ANDALUCIA
SLOVENIJA
FRYSLAN

The once and future Europe. An 11" x 15" full-color map, uncloaking the borders of 28 active home-rule movements, bejewelled with their flags. Accounts of their history and current activity appear on the back. Bruce McGillivray's exquisite cartography is mailed in a tube and comes with articles on devolutionary politics by Peter Berg and Jon Stewart.

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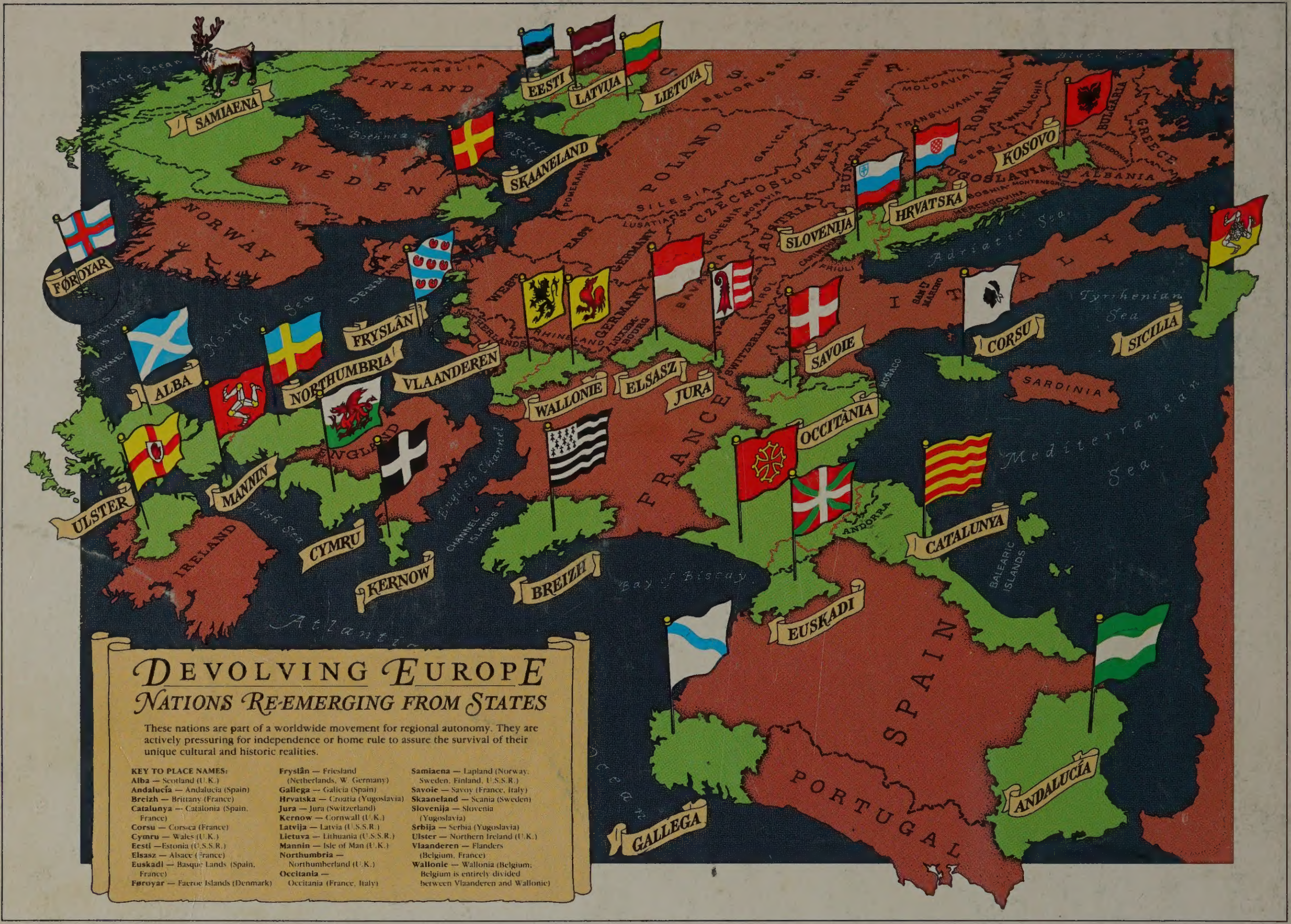
Arctic Ocean
SAMIAENA
FINLAND
EESTI
LATVIJA
LIETUVA
S. S. R.
BELORUSSIA
UKRAINE
MOLDAVIA
TRANSYLVANIA
ROMANIA
WALLACHIA
BULGARIA
GREECE
KOSOVO
ALBANIA
SERBIA
YUGOSLAVIA
BOSNIA
HERCEGOVINA
MONTENEGRO
HRVATSKA
SLOVENIJA
HUNGARY
CZECHOSLOVAKIA
SILESIA
MORAVIA
BOHEMIA
LUSATIA
POLAND
GALICIA
POMERANIA
Gulf of Bothnia
Baltic Sea
SKAANELAND
SWEDEN
NORWAY
FØROYAR
SHETLAND
ORKNEY
North Sea
DENMARK
FRYSLÂN
ALBA
NORTHUMBRIA
VLAANDEREN
WALLONIE
ELSASZ
JURA
GERMANY
RHINELAND
LUXEMBOURG
AUSTRIA
SWITZERLAND
SAVOIE
FRIULI
SAN MARINO
ITALY
Adriatic Sea
CORSU
SICILIA
SARDINIA
Tyrrhenian Sea
Mediterranean Sea
MONACO
OCCITANIA
FRANCE
CATALUNYA
BALEARIC ISLANDS
ANDORRA
EUSKADI
SPAIN
ANDALUCIA
PORTUGAL
GALLEGA
BREIZH
CHANNEL ISLANDS
English Channel
KERNOW
CYMRU
ENGLAND
MANNIN
Irish Sea
ULSTER
IRELAND
Bay of Biscay
Atlantic Ocean

DEVOLVING EUROPE

NATIONS RE-EMERGING FROM STATES

These nations are part of a worldwide movement for regional autonomy. They are actively pressuring for independence or home rule to assure the survival of their unique cultural and historic realities.

KEY TO PLACE NAMES:
Alba — Scotland (U.K.)
Andalucía — Andalucia (Spain)
Breizh — Brittany (France)
Catalunya — Catalonia (Spain, France)
Corsu — Corsica (France)
Cymru — Wales (U.K.)
Eesti —Estonia (U.S.S.R.)
Elsasz — Alsace (France)
Euskadi — Basque Lands (Spain, France)
Føroyar — Faeroe Islands (Denmark)
Fryslân — Friesland (Netherlands, W. Germany)
Gallega — Galicia (Spain)
Hrvatska — Croatia (Yugoslavia)
Jura — Jura (Switzerland)
Kernow — Cornwall (U.K.)
Latvija — Latvia (U.S.S.R.)
Lietuva — Lithuania (U.S.S.R.)
Mannin — Isle of Man (U.K.)
Northumbria — Northumberland (U.K.)
Occitania — Occitania (France, Italy)
Samiaena — Lapland (Norway, Sweden, Finland, U.S.S.R.)
Savoie — Savoy (France, Italy)
Skaaneland — Scania (Sweden)
Slovenija — Slovenia (Yugoslavia)
Srbija — Serbia (Yugoslavia)
Ulster — Northern Ireland (U.K.)
Vlaanderen — Flanders (Belgium, France)
Wallonie — Wallonia (Belgium; Belgium is entirely divided between Vlaanderen and Wallonie)

New Map

"Devolving Europe" $5

by Bruce McGillivray

The once and future Europe. This meticulously researched map portrays the intensifying grass-roots activism for cultural diversity and self-rule in Europe. The phenomenon is worldwide and growing. It spells the end of empire.

Actual map is twice this size, 15" x 11".

New Offer

"Devolving Europe" map FREE with your new or renewal *CoEvolution* subscription

A $19 value for $14, this offer lasts until June 21, 1982. The map has two explanatory articles by Peter Berg and Jon Stewart sent with it. If you want even more background to accompany your gift, you can request that the subscription begin with issue #32, the Winter 1981/82 "Bioregions" issue.